

Northeast Illinois

Railroad Trespassing Prevention Webinar



Northeast Illinois Railroad Trespassing Webinar



Ashley MB Wilson, M.A. **Event & Logistics Consultant**

Ashley has over six years of experience managing large scale in-person and virtual events within the non-profit sector. She holds a Master's degree in Clinical Psychology from Murray State University. Ashley is excited to work with the Federal Railroad Administration (FRA) to host these important events.

If you have any technical difficulties, please message Ashley Wilson in the chat or email Ashley at bieze65@gmail.com.



Welcome & Introductions



Monica Shaw - Federal Railroad Administration (FRA)

As a Transportation Specialist Mrs. Shaw coordinates FRA involvement in trespass prevention programs, serves as Project Manager overseeing the Operation Lifesaver Inc. Grant, FRA's Law Enforcement Trespass and Suicide Prevention Grant Programs. Mrs. Shaw holds a Bachelor of Business Administration Degree in Project Management. Mrs. Shaw has an extensive career with FRA for 34 years.



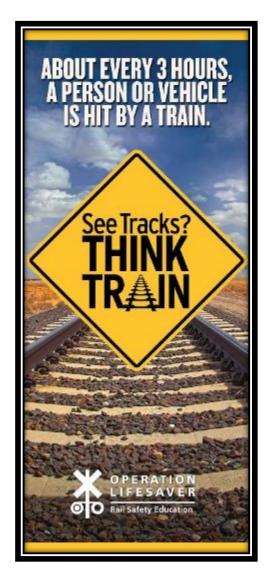
Michail Grizkewitsch - FRA

Since 2004 Michail Grizkewitsch has been a part of the FRA's Office of Railroad Safety as a Railroad Trespassing Program Specialist. He partners with federal, state, and local government officials throughout the United States to establish and implement trespass prevention programs.



Northeast IL Railroad Trespassing Prevention Webinar

- This is one of a series of webinars planned throughout the United States. Our topics today is to raise awareness of the dangers and effects of trespassing, to seek out low-cost solutions to local trespassing issues, to discuss practicable ideas for technological improvements and provide you with funding solutions.
- In the future FRA and our stakeholders will hold additional webinars and possibly in-person summits to expand on these topic areas. We are also looking for topics from you, please feel free anytime during this webinar to suggest future topics on our chat. Or if you prefer, you can always drop Mike or Monica an email.
- During the webinar if you have any questions, please use the chat box. At the end of the webinar the team will answer questions received.





The Experts



Mike Long



Jennifer Killen



Scott H. Gabree, Ph.D.



Marco daSilva



Sam Wright



Francesco Bedini Jacobini



Hilary Konczal



Brian Vercruysse



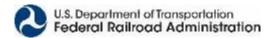
Tina Blumenberg



Shala Blue, PH.D.



James Payne



Agenda

- Welcome Remarks
- FRA's National Strategy to Prevent Railroad Trespassing Perspectives
- Railroad Trespassing Treatments,
 Tools and Funding Solutions
- Next Steps





Content Warning: discussion of self harm

Suicide Prevention Resources (free, confidential, 24/7)

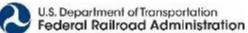


Whether it's your friends, family, or community, everyone needs someone to lean on.



If you don't know where to turn, you can text **HOME** to **741741**.

A volunteer Crisis Counselor with Crisis Text Line will be there for you. It's free and 24/7.



Welcome

Mike Long Director of Railroad Operations and Outreach Federal Railroad Administration

Mike is responsible for safe rail operations, as well as outreach to the rail industry, associations, and labor. Mike was the Senior Safety and Operations Manager for the Short Line Safety Institute prior to returning to FRA in 2018.



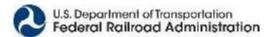


Welcome



Jennifer "Sis" Killen Superintendent Cook County Department of Transportation and Highways (DOTH)

Ms. Killen was a key orchestrator in the transformation of the Department from a road-centric environment to a culture with a broader range of transportation projects. Sis co-led the completion of the Department's long range transportation plan, establishing policy priorities to guide holistic infrastructure investment to address local and regional project needs through strategic partnerships. She is responsible for all aspects of transportation facility planning, development, design, construction and maintenance at the Department.



Trespassing Perspectives





James Payne Staff Director Grade Crossing & Trespassing Prevention Outreach Division

James spent nearly 10 years in the United States Marine Corps. Joined the Automated Track Inspection Program (ATIP) in 2004 spending 8 years on the ATIP cars. James joined FRA in 2012 as the ATIP Program Manager. In 2019 James was selected as the Staff Director for Grade Crossing and Trespass Outreach RRS 30.3.



National Strategy to Prevent Trespassing on Railroad Property

In its report on the Fiscal Year 2018 budget, the House Committee on Appropriations requested the FRA to:

- Identify and study
 the causal factors
 that lead to
 trespassing incidents
 on railroad property
- Develop a National Strategy

Report to Congress

National Strategy to Prevent Trespassing on Railroad Property



October 2018

Federal Railroad Administration U.S. Department of Transportation

FRA Developed a
National Strategy,
focusing on four
strategic focus areas:

- 1. Data Gathering and Analysis,
- 2. Community Site Visits,
- 3. Funding,
- Partnerships with
 Stakeholders.



Strategic Area 4. Partnerships

- 1. Develop system of sharing trespasser hot spot data with advocacy organizations to focus their activities where they will yield the greatest return on investment and establish communication and reporting procedures to share information and provide feedback on effectiveness of efforts.
- 2. Collaborate and partner with government agencies, such as the Substance Abuse and Mental Health Services Administration, to develop and implement targeted outreach to address suicides by train.



FRA awarded four grants through its FY 2019 and 2020 Railroad Trespassing Suicide Prevention Grant Program.



Railroad Trespassing Enforcement Grants

The objective of the program is to deter railroad trespass in the most prone areas through law enforcement activities.

- Fitchburg, MA: Subject passed out in between railroad tracks; officers came upon subject, administered Narcan and removed subject from tracks and taken to hospital.
- Greensboro, NC.: 1st qtr. of FY21, Greensboro reported officers discovered a subject who attempted to commit suicide by train. Subject was taken to a medical hospital.
- Hollywood, FL: 1/29/2021, officers located an intoxicated male passed out on the tracks, they were able to pull him off the tracks prior to any train strike.

2020 Law Enforcement Grant Totals							
Total Contacts	Total Summons/Arrest Total Warnings Trespass Warnings Other Warnin						
649	214	435	379	56			
106	0	106	98	10			
114	34	80	57	10			
0	0	0	0	21			
713	1	148	148	8			
876	397	758	776	245			
15	0	15	5	10			
14	6	12	9	3			
29	0	29	15	14			
184	69	115	88	27			
474	398	76	0	76			
3174	1119	1774	1575	480			

In 2021 FRA announced \$2.3 million in available funding under the 2021 CRISI Grant Program.

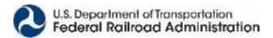


Highway-Rail Grade Crossing and Trespassing Trends



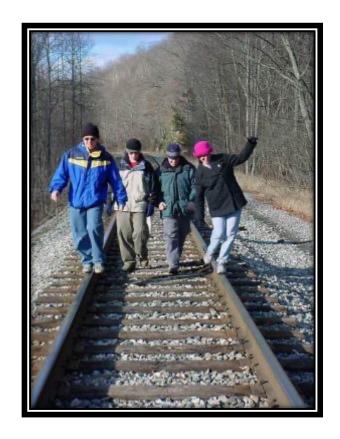
Tina Blumenberg Grade Crossing Inspector Grade Crossing & Trespassing Prevention Outreach Division

Tina Blumenberg is a Grade Crossing Inspector with the Federal Railroad Administration. She has worked with the FRA for 11 years and has been in the Grade Crossing Discipline for 8 years. Prior to the FRA, she spent 8 years in the United States Army serving during Operation Enduring Freedom as a Staff Sergeant and Section Leader Supervisor, receiving the Global War on Terrorism Service Medal. She also worked at Expeditor's International as a Brokerage Representative in the intermodal transportation sector. She received a Bachelor of Arts Degree from Columbia College Chicago having studied 2 majors, including Business Administration.



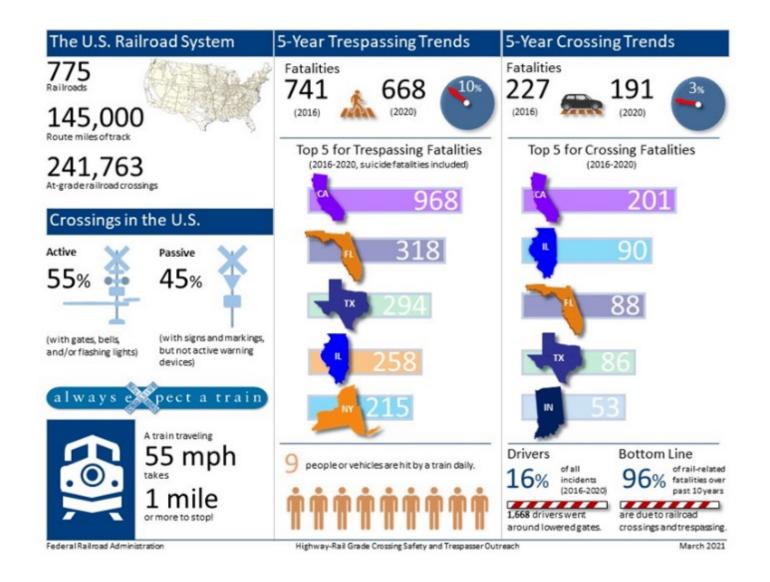
Highway-Rail Grade Crossing and Trespassing Trends







National Highway-Rail Grade Crossing and Trespassing Trends





Trespassing Casualties – State of Illinois

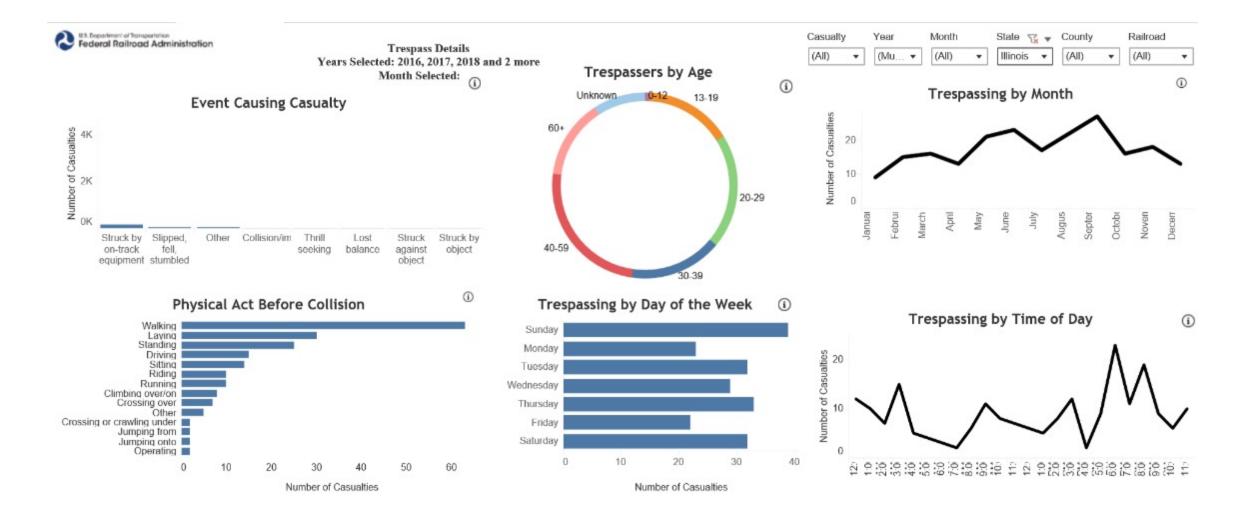
	State of Illinois							
		Trespas	ssing Casua	alties				
	2016	2017	2018	2019	2020	Total		
Fatalities	18	15	20	27	18	98		
Injuries	16	27	20	20	27	110		
		Suicide Cas	sualties					
Fatalities	25	24	18	11	15	93		
Injuries	3	4	1	1	0	9		
	Total Casualties							
	Fatalities							
		Injuri	es			119		







Trespassing Actions – State of Illinois





Trespassing Casualties – Cook County

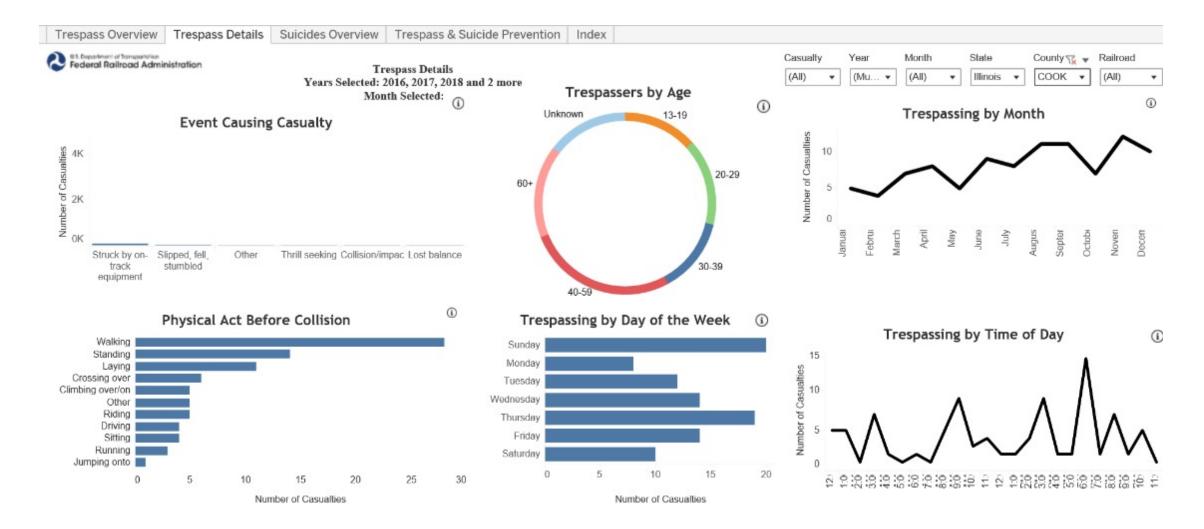
	Cook County Specific								
		Trespa	ssing Casua	alties					
	2016 2017 2018 2019 2020 T								
Fatalities	10	6	9	12	8	45			
Injuries	11	16	9	6	8	50			
		Suici	de Casualti	ies					
Fatalities	11	7	9	5	8	40			
Injuries	2	2	0	0	0	4			
Total Casualties									
Fatalities									
		Injuri	ies			54			



Cook County is 2nd in the nation for most trespassing fatalities.



Trespassing Actions – Cook County





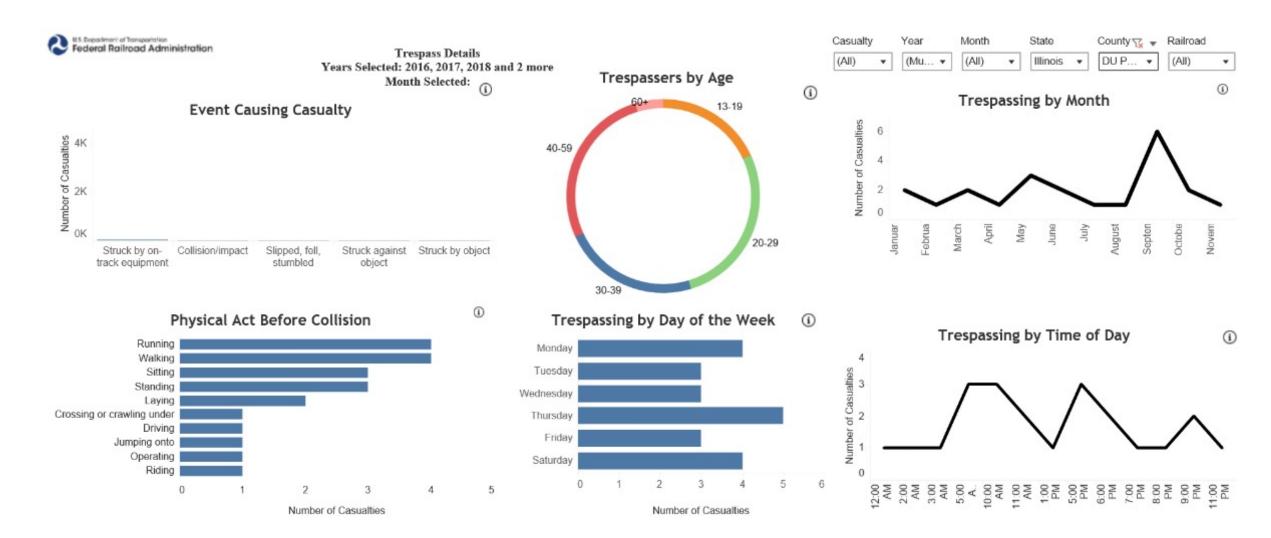
Trespassing Casualties – DuPage County



	DuPage County Specific							
	Trespassing Casualties							
	2016	2017	2018	2019	2020	Total		
Fatalities	1	0	3	6	2	12		
Injuries	1	1	2	4	2	10		
		Suici	de Casualti	ies				
Fatalities	4	2	2	0	4	12		
Injuries	1	0	0	0	0	1		
	Total Casualties							
	Fatalities							
		Injuri	es			11		



Trespassing Actions – DuPage County

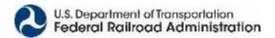




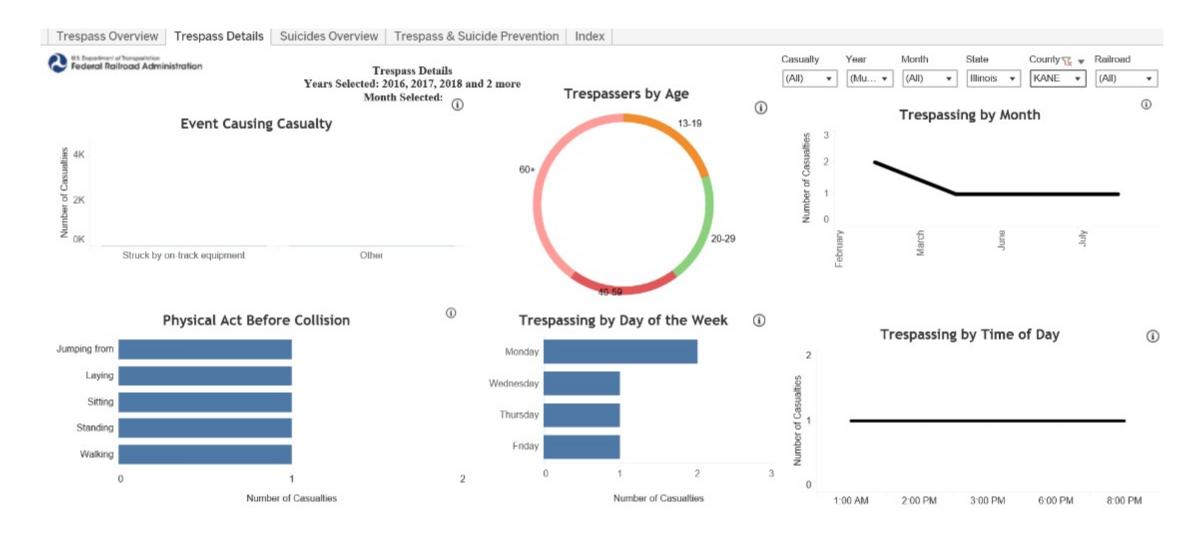
Trespassing Casualties – Kane County

	Kane County Specific							
	Trespassing Casualties							
	2016	2017	2018	2019	2020	Total		
Fatalities	1	1	0	1	0	3		
Injuries	0	1	0	1	0	2		
		Suici	de Casualt	ies				
Fatalities	0	2	0	0	0	2		
Injuries	0	0	0	0	0	0		
	Total Casualties							
Fatalities						5		
		Injuri	es			2		





Trespassing Actions – Kane County





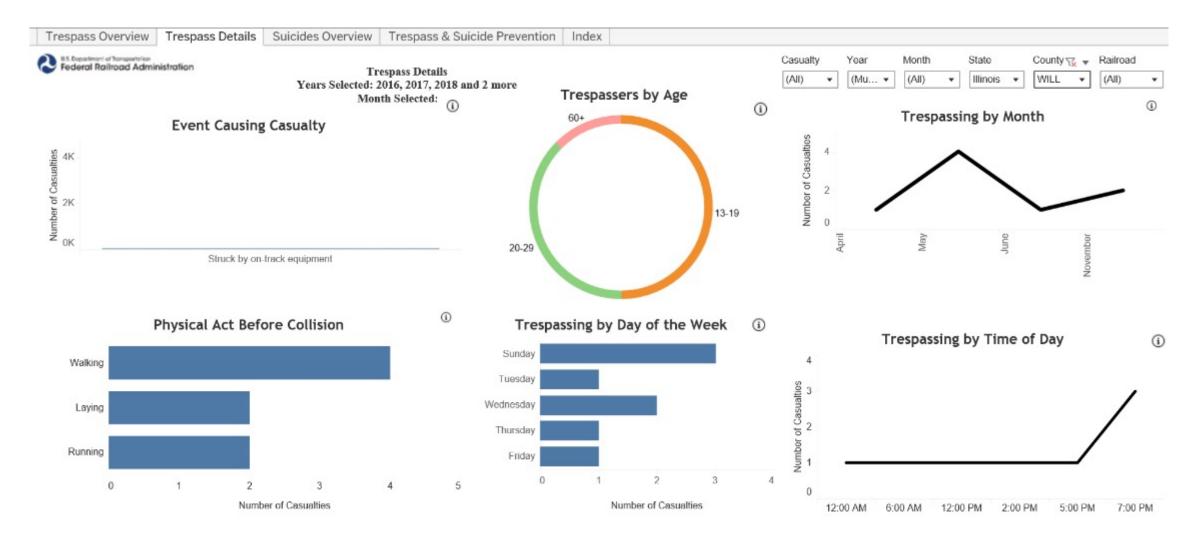
Trespassing Casualties – Will County

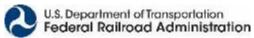
Will County Specific								
	Trespassing Casualties							
	2016	2017	2018	2019	2020	Total		
Fatalities	0	0	1	4	1	6		
Injuries	0	0	0	1	1	2		
		Suici	de Casualti	ies				
Fatalities	0	0	1	1	1	3		
Injuries	0	0	0	0	0	0		
Total Casualties								
Fatalities								
		Injuri	es			2		





Trespassing Actions – Will County





Department of Transportation and Highway Trends

Sam Wright Freight Planner Cook County DOTH

Sam Wright is a Freight Planner with the Cook County
Department of Transportation and Highways. He started with
Cook County in 2018 and previously worked as a transit planner
for a consulting firm. His work at the County includes project
manager for local truck routing studies and coordinator for the
Burnham Avenue Grade Separation project in the Village of
Burnham, Illinois. Mr. Wright holds a bachelor's degree in
Urban Studies from Stanford University and a Master of Urban
Planning from Harvard University.





Rail-Related Incidents in Northeast Illinois

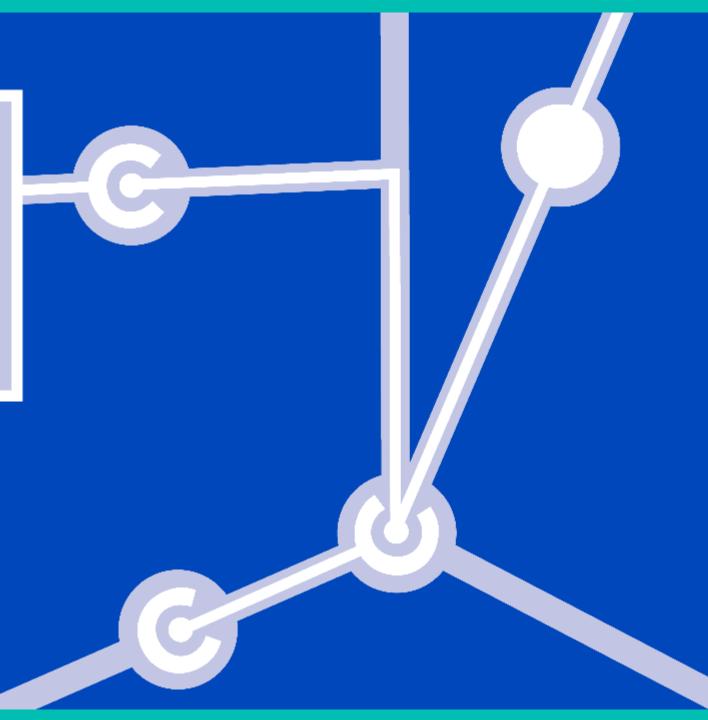
October 27th, 2021





HONORABLE TONI PRECKWINKLE PRESIDENT, COOK COUNTY BOARD OF COMMISSIONERS JENNIFER "SIS" KILLEN, P.E., PTOE SUPERINTENDENT, DEPARTMENT OF TRANSPORTATION & HIGHWAYS

A project delivered by the Cook County Department of Transportation & Highways

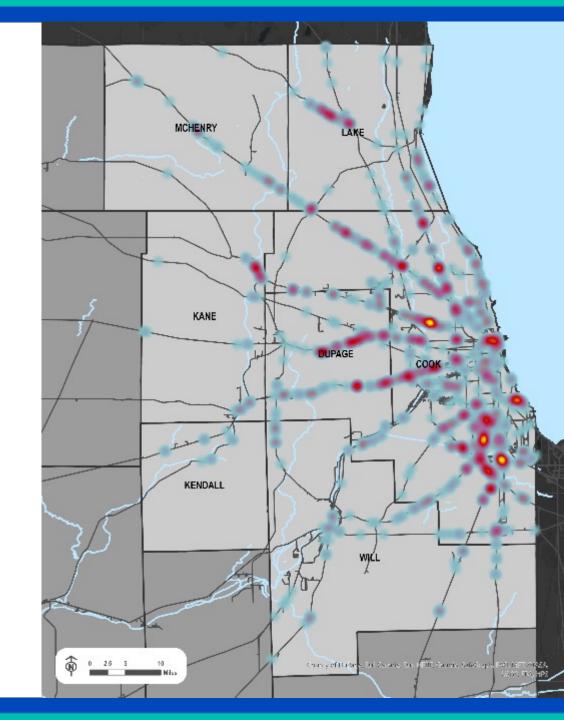


FRA Trespass Prevention

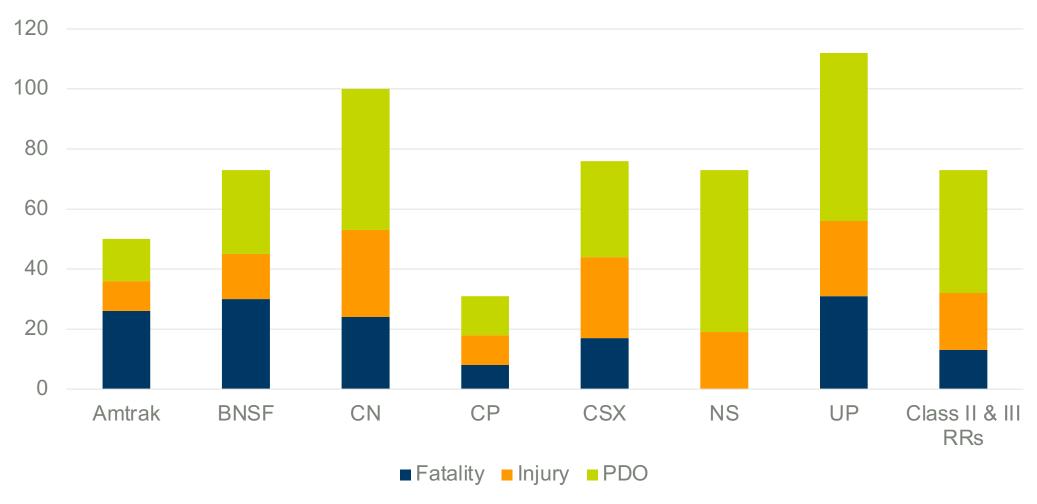
- FRA targets 10 highest rail fatality counties, with Cook County ranking second highest
- In September 2019, FRA contacts Cook County about hosting a trespasser summit

Overview of All Incidents

- 1,075 events from January 2012 to December 2020
- Data is from an Illinois Commerce Commission database that compiles rail incidents
- Scope expanded to seven-county CMAP (Chicago region MPO) region



Incidents by Railroad



Note: Fatalities include suicides and injuries include attempted suicides.

Source: ICC Incident Data, 2012 to 2020

Regional Incidents

Events by County

County	Fatality	Injury	Property Damage	Total
Cook	265	192	300	757
DuPage	66	28	22	116
Kane	21	9	2	32
Kendall	1	3	5	9
Lake	38	16	20	74
McHenry	19	2	4	25
Will	28	13	21	62
Total	438	263	374	1,075

Note: Fatalities include suicides and injuries include attempted suicides.

Source: ICC Incident Data, 2012 to 2020

Highest Number of Events by Municipality

Municipality	Fatality	Injury	Property Damage	Total
Chicago	107	81	132	320
Des Plaines	12	4	2	18
Elgin	10	6	2	18
Cicero	5	5	6	16
Joliet	7	3	5	15
Blue Island	2	6	6	14
Dolton	1	3	10	14
Alsip	4	3	6	13
Riverdale	2	5	6	13
Wheaton	7	5	1	13

Regional Incidents by Transportation Mode

2012-2020

Event Type	Accidental Fatality	Accidental Injury	Property Damage	Suicide	Attempted Suicide	Total
Automobile	29	91	250	1	3	374
Truck	2	23	114	0	0	139
Pedestrian	166	121	2	226	18	533
Bicycle	12	3	2	1	0	18
Total	209	238	368	228	21	1064

Note: Table does not include events with railroad machinery.

Source: ICC Incident Data, 2012 to 2020

Most Common Incidents



Unintentional pedestrian injuries & deaths

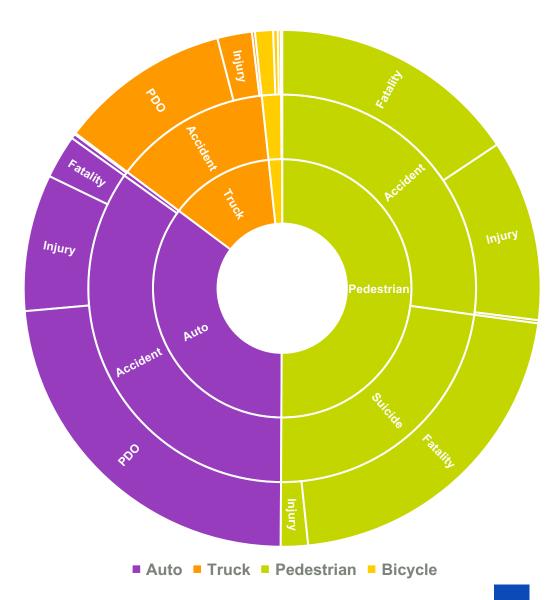
Intentional pedestrian deaths (suicides)



Automobile damage



Truck damage



Pedestrian Incidents



Unintentional pedestrian injuries & deaths

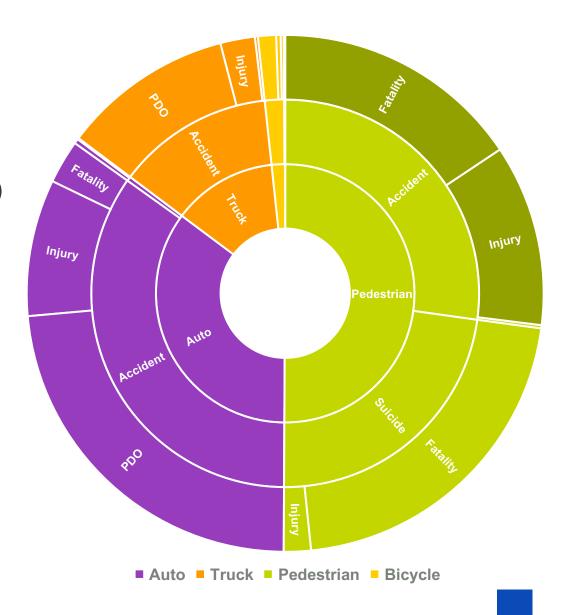
Intentional pedestrian deaths (suicides)



Automobile damage



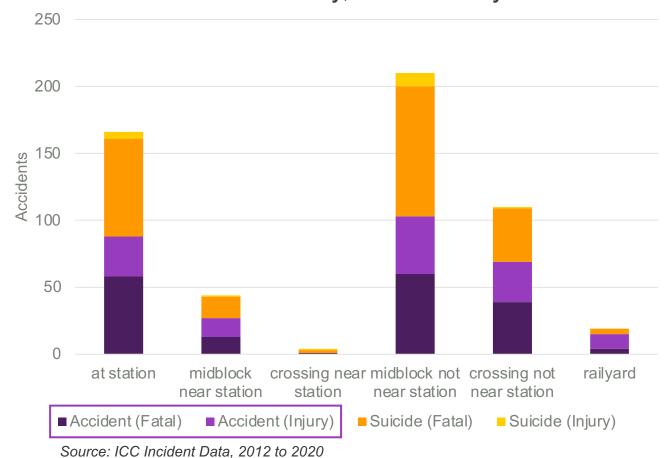
Truck damage

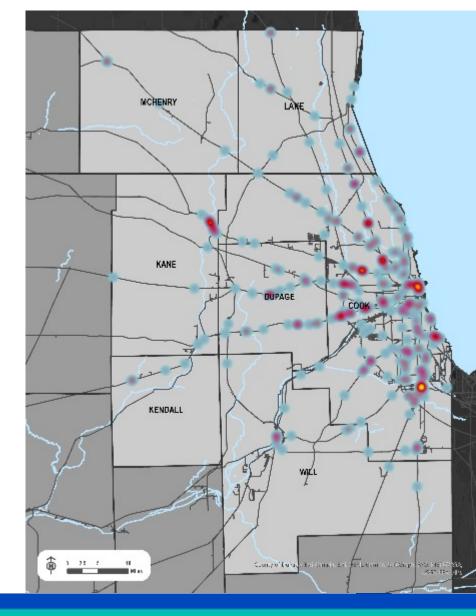




Unintentional Pedestrian Injuries and Fatalities

Pedestrian Accidents by Location, Intentionality, and Severity

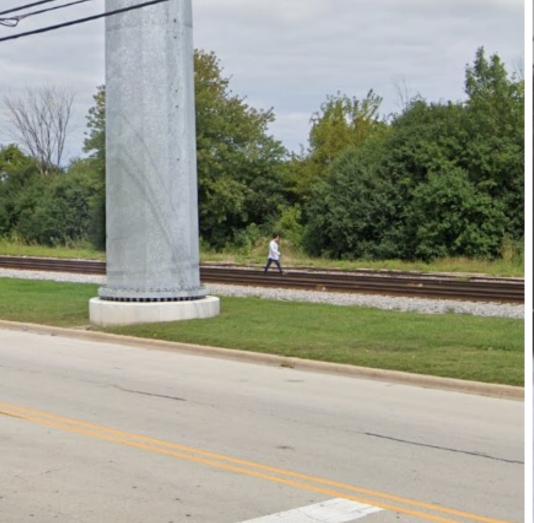




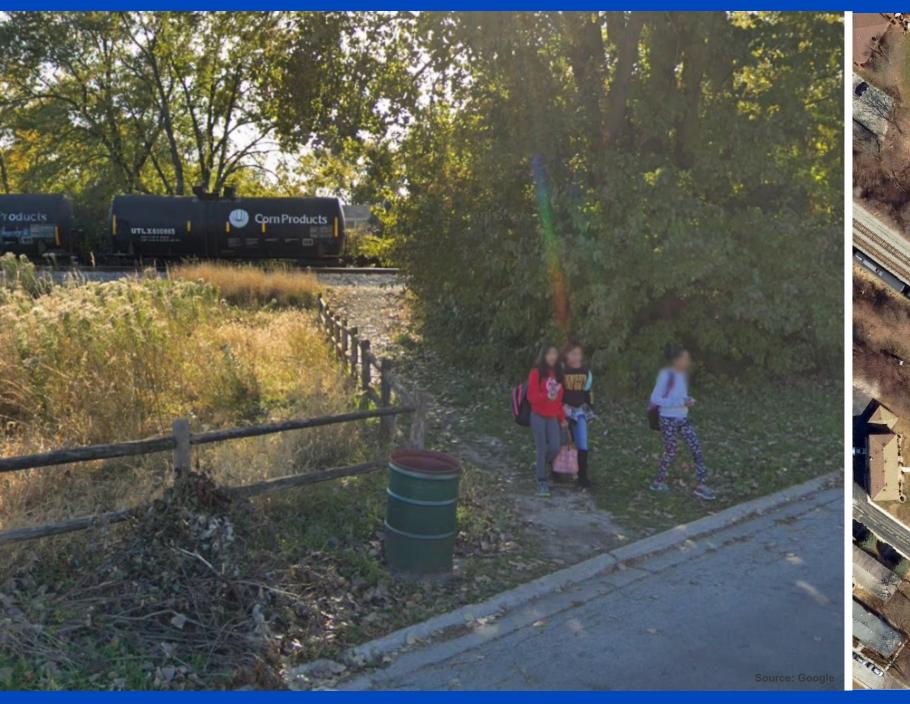


Unintentional Pedestrian Injuries and Fatalities











Pedestrian Incidents



Unintentional pedestrian injuries & deaths

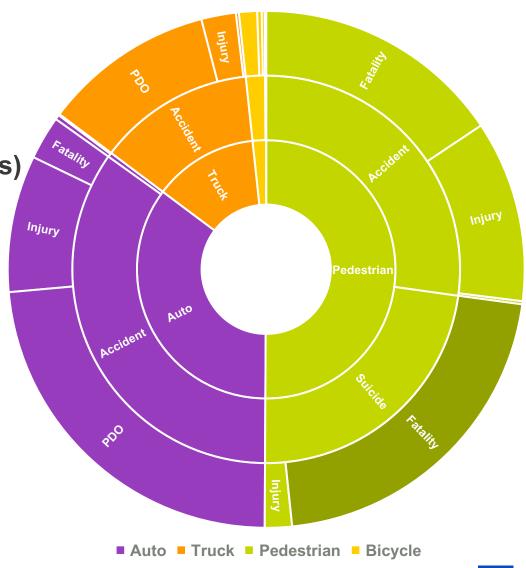
Intentional pedestrian deaths (suicides)



Automobile damage



Truck damage



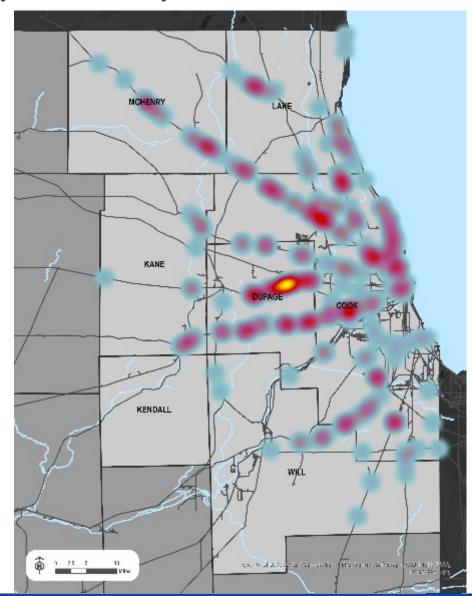


Intentional Pedestrian Fatalities (Suicides)

Highest Number of Suicides by Municipality

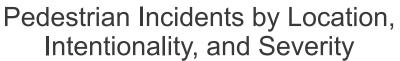
Municipality	County	Population	Suicides
Chicago	Cook	2,693,976	33
Des Plaines	Cook	58,899	8
Lombard	DuPage	44,303	7
Naperville	DuPage	148,449	7
Tinley Park	Cook	55,773	6
Villa Park	DuPage	21,483	6
Wheaton	DuPage	52,745	6
Woodstock	McHenry	25,240	6
Tinley Park	Will	55,773	6
Lake Forest	Cook	19,446	5

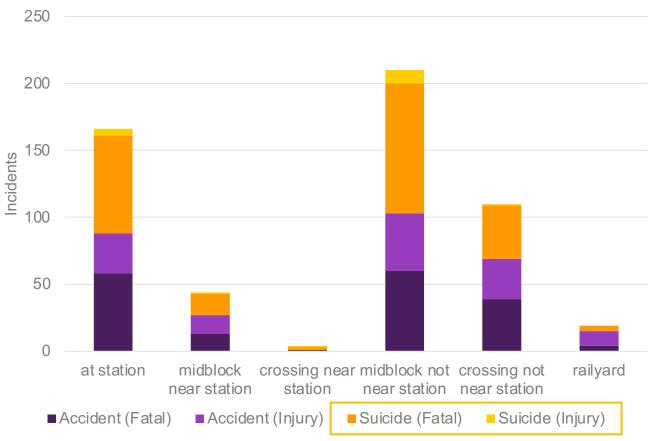
Source: ICC Incident Data, 2012 to 2020





Intentional Pedestrian Fatalities (Suicides)







Automobile Incidents

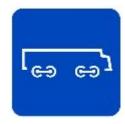


Unintentional pedestrian injuries & deaths

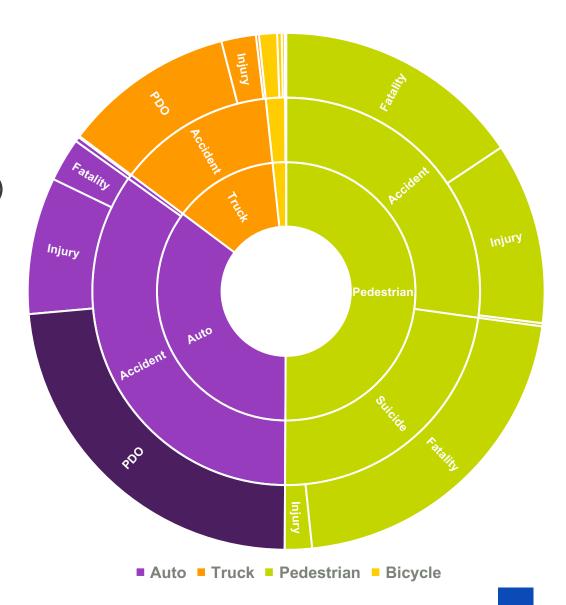
Intentional pedestrian deaths (suicides)



Automobile damage



Truck damage





Unintentional Automobile Damage

83% of automobile accidents occurred at locations with gates





Truck Incidents



Unintentional pedestrian injuries & deaths

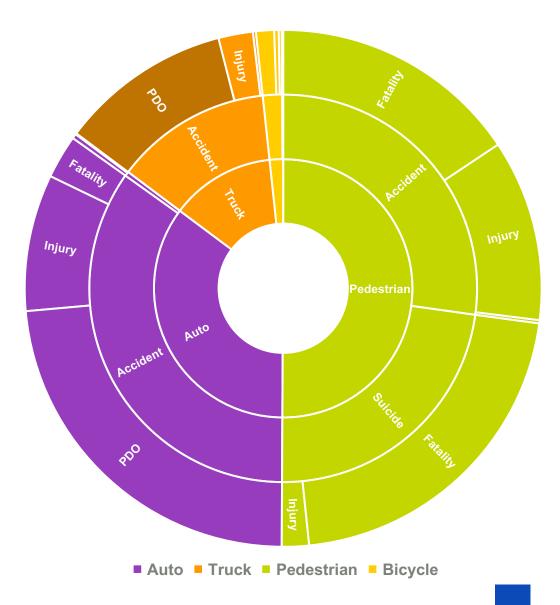
Intentional pedestrian deaths (suicides)



Automobile damage



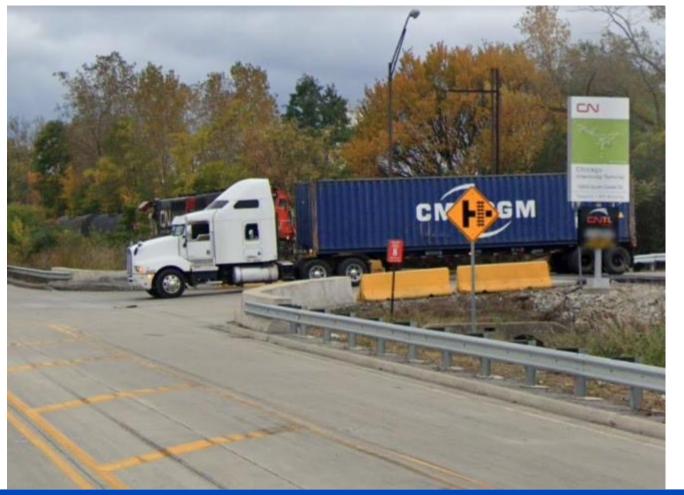
Truck damage

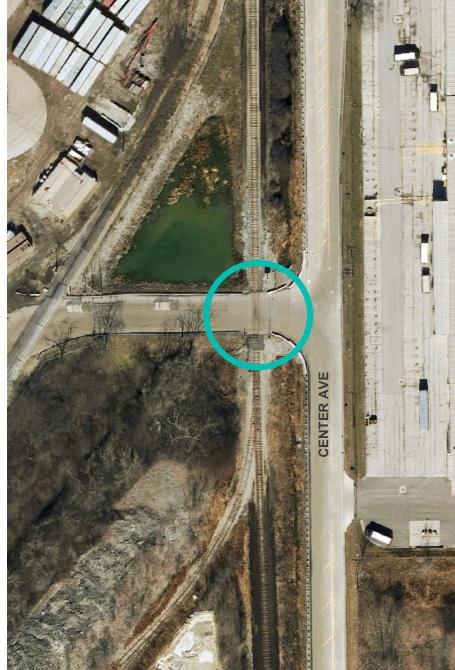




Unintentional Truck Damage

63% of truck incidents occur in a railyard





Most Common Incidents



Unintentional pedestrian injuries & deaths

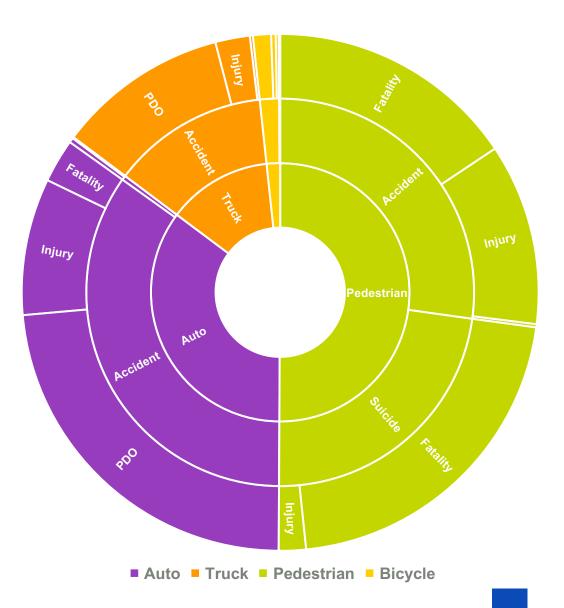
Intentional pedestrian deaths (suicides)



Automobile damage



Truck damage



Thank you!

Sam Wright

Transportation Planner

Cook County Department of Transportation and Highways

69 W. Washington Street, Suite 2300 | Chicago, IL 60602

P: 312-603-1650

samuel.wright@cookcountyil.gov

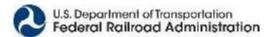
Hilary E. Konczal, METRA



Hilary E. Konczal Chief Safety & Environmental Officer Metra

Hilary E. Konczal – Metra's Chief Safety & Environmental Officer has over 30 years of service with Metra. He has an extensive background in safety, environmental compliance, industrial hygiene, railroad operations, regulatory compliance and security.

Hilary is responsible for the administrative oversight and management of Metra's safety programs and risk reduction initiatives, environmental compliance and industrial hygiene activities. He leads a team of safety and environmental professionals who are responsible for safeguarding Metra's employees, passengers and contractors.





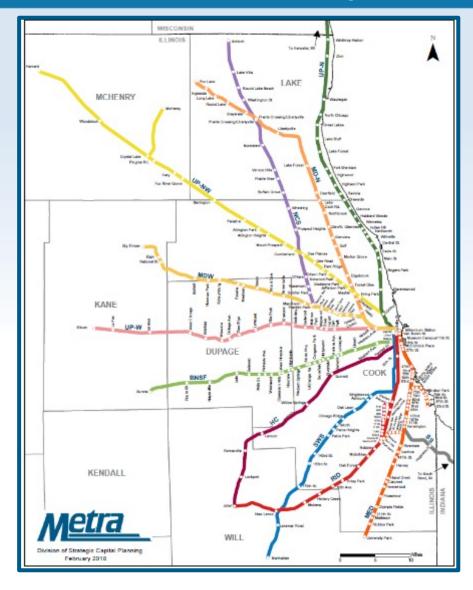
Trespasser & Suicide Prevention Strategies



Presented to: FRA Railroad Trespass Prevention Summit October 27, 2021

Hilary E Konczal
Metra Chief Safety & Environmental Officer
Hkonczal@metrarr.com
312-322-6743

Metra System Overview



METRA BY THE NUMBERS

- . 76.1 million passenger trips in 2018
- 692 weekday trains
- 273 Saturday trains
- 181 Sunday trains
- 242 stations
- . 1,155 miles of track
- 488 route miles
- 168 locomotives
- 854 diesel passenger railcars
- . 186 electric propelled passenger railcars
- 847 bridges
- 565 grade crossings
- 24 rail yards
- 91,000 parking spaces
- 12 electrical substations
- . 3 electrical tie stations
- 12 fuel facilities



Operational Challenges of Trespasser Prevention

- ➤ Open System
- Large system
- > People use railroad property as a shortcut, taking pictures, etc.
- Limited number of police officers to patrol the system
- > Trains travel at speeds up to 79 mph
- > It takes a train up to a mile to stop
- Metra interfaces with freight, South Shore (NICTD), and Amtrak trains
- > People use trains to end their suffering

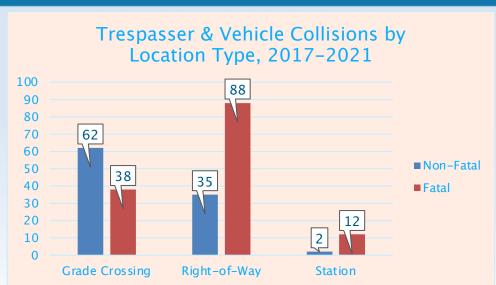


Data Collection & Analysis

- > Near Misses reported by train crews
- ➤ Police calls for service in response to right-ofway trespassing
- Interventions with suicidal individuals on or about Metra property
- > Train collisions with vehicles & pedestrians
- ➤ Vehicle collisions with / incursions onto railroad property (crossing gate strikes, cars on the tracks, etc.)



Summary Trespassing Data









Metra Data, 2017-present

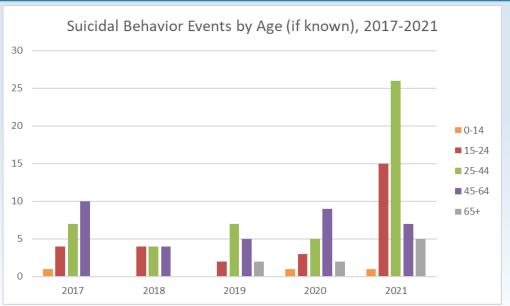
	Suicidal	Behavior-Re	lated Events		
Category	2017	2018	2019	2020	2021 thru 9/30
Suicidal Subjects Intervened	51	61	61	72	45
**Suspected, Confirmed, & Attempted Suicides	22	13	16	19	13
Total	73	74	77	91	58
	20	Rail Collisio	ns*	J	
Category	2017 Fatal/Non/Total	2018 Fatal/Non/Total	2019 Fatal/Non/Total	2020 Fatal/Non/Total	2021 thru 9/30 Fatal/Non/Total
Train vs. Vehicle	2/9/11	2/10/12	0/11/11	2 / 10 / 12	2 / 16 / 18
Train vs. Trespasser (Right of Way or Station)	18/5/23	7/5/12	18 / 6 / 24	16/1/17	14/2/16
Train vs. Trespasser (Grade Crossing)	9/1/10	9/3/12	5/2/7	2/1/3	2/1/3
Total	29 / 15 / 44	18 / 18 / 36	23 / 19 / 42	20 / 12 / 32	18 / 19 / 37

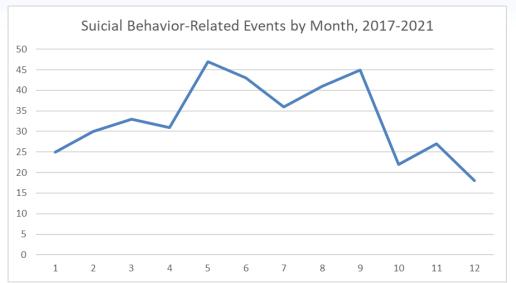
^{*}Collision data inclusive of Metra train-involved collisions only. Other freight & passenger rail collisions occur in the service area.

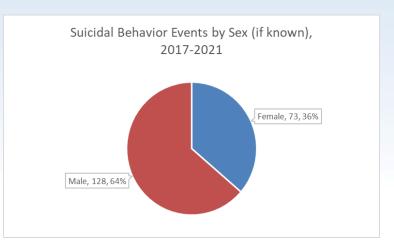
**Suspected and Confirmed Suicides are included in the Total Fatalities.



Metra Data, 2017-present



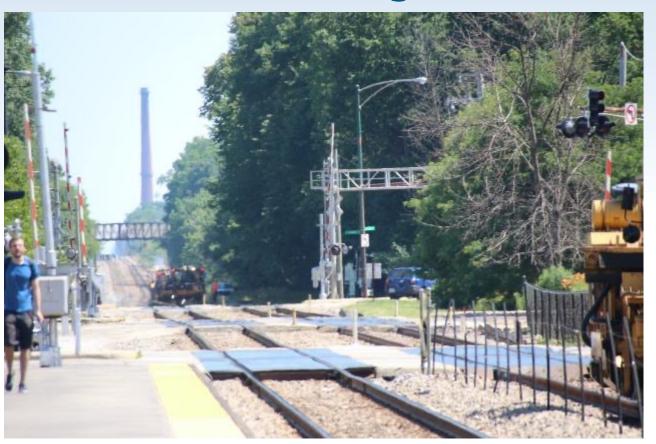






Response & Prevention

Given what we know, what are we doing about it?





Near Miss Reporting - FRA & University Partnership

Trespasser Notifications

- Engineers/Conductors
- Metra COPS Mobile App
- Metra Police, Local Police
- The Public
- Tracked in GIS Mapping System

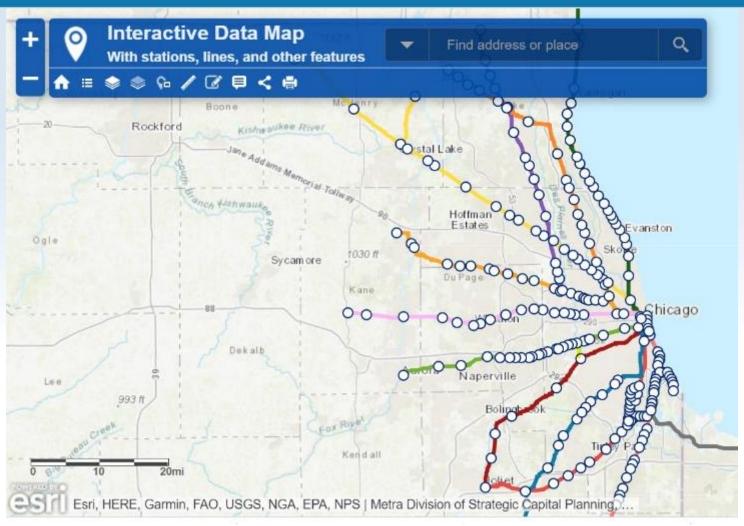




Date:	Time:	
Reporter Name: "		Phone #:
Employee ID:		
Train #:	Line/9ubdivi	sion:
Street / Mile Post		DOT#:
Nearest Station:		City:
Molator Type:	☐ Motorist ☐ Peciestria	n 🗆 Commuter(s)
Enter Informatio	n below that best describ	es the incident:
Vehicle Details		Vehicle Type
License Plate #:		☐ Bicycle ☐ Emergency
State:		☐ Bus ☐ Taxil / Limousine
Make:		☐ Car ☐ Motorcycle
Model:		☐ Miniwan / Van ☐ SUV / Pickup Truck
Onliver Action Warning devices a	ctivated:	☐ Construction
Oriver Action Warning devices a Did not stop Stopped before	civated: Yes No	☐ Construction
Oriver Action Warning devices a Did not stop Stopped before	e crossing then proceeded fouled tracks then proceeded	Construction Tresposeer Activity
Driver Action Warning devices a Did not stop Stopped before Stopped on or Trespasser Deta Gender / Race	e crossing then proceeded fouled tracks then proceeded the	
Color: Driver Action Warning devices a Did not stop Stopped before Stopped on or Trespasser Deta Gender / Race Male	e crossing then proceeded fouled tracks then proceeded the Age range	Trespasser Activity Crossed in front of train Group gathering around crossing/platform
Color: Driver Action Wisming devices a Did not stop Stopped before Stopped on or Treopasser Deta Gender / Race Male Formale	e crossing then proceeded fouled tracks then proceeded life Age range Adult Jevenile (under 17)	Trespasser Activity Crossed in front of train Group gathering around crossing/platters Paying chicken I other
Driver Action Warning devices a Did not map Stopped before Stopped on or Treopasser Deta Gender / Race Male Female Mixed Group:	e crossing then proceeded fouled tracks then proceeded like Age range Adult Jevenile (under 17)	Trespasser Activity Crossed in front of train Group gathering around crossing/platform Paying chicken / other Walking hunning down tracks
Color: Driver Action Wisming devices a Did not stop Stopped before Stopped on or Treopasser Deta Gender / Race Male Formale	e crossing then proceeded fouled tracks then proceeded like Age range Adult Jevenile (under 17)	Trespasser Activity Crossed in front of train Group gathering around crossing/platforn Raying chicken / down tracks Walking hunning down tracks Went around, under or through
Driver Action Warning devices a Did not map Stopped before Stopped on or Treopasser Deta Gender / Race Male Female Mixed Group:	e crossing then proceeded fouled tracks then proceeded like Age range Adult Jevenile (under 17)	Treepaseer Activity Cressed in front of train Group gathering around crossinglylatio Playing chicken J other Walking hunning down tracks



Interactive Data Mapping – esri





Railroad Property is Private Property

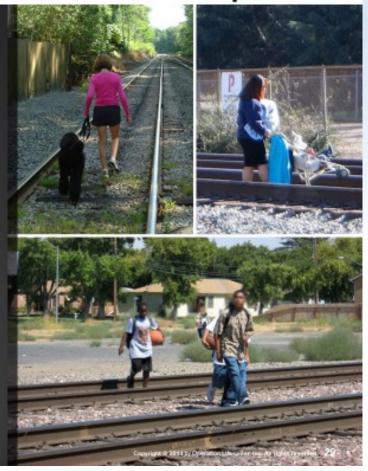
Do Not Walk on Tracks





Walking on railroad tracks is dangerous and illegal.

- Many people believe they will always hear a train coming, but some trains are silent and difficult to hear.
- Engaging in conversation, speaking on a cell phone, and listening to music are all potentially deadly distractions.
- Trains can run on any track, at any time, from either direction.
- Walking, lying, or sitting on the tracks can cause injuries and even death.
- Tracks are for trains, not for people— Stay Off! Stay Away! Stay Alive!





Public Outreach/Education

Operation Lifesaver

- Schools, Pre-K 12
- Drivers' Education
- Community Events & Fairs
- Professional Drivers (Bus/Truck Drivers)
- First Responders (Fire/EMS/Police)

 Metra's Station Safety Blitz Program (50+ Stations a year)









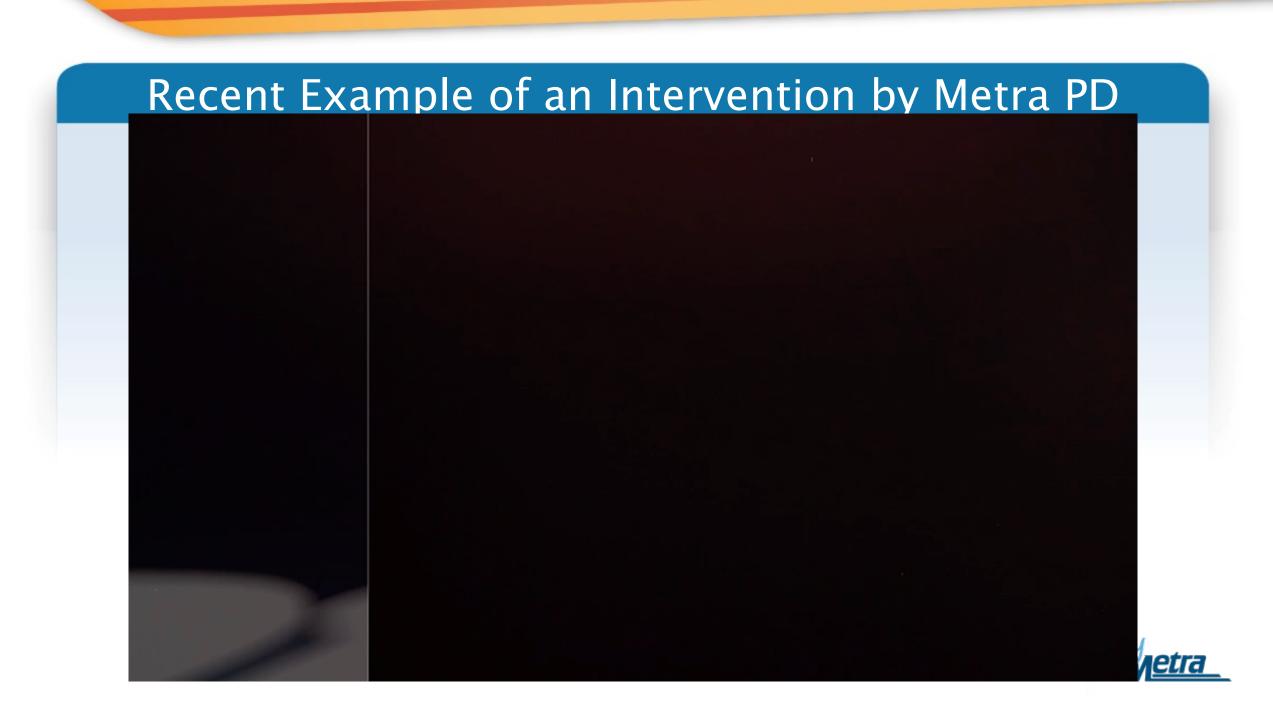


tation

Why Implement a Mental Health Awareness / Suicide Prevention Program

- Suicide by train accounts for 12% of all suicides (varies by country)
- Suicide by train has a higher lethality than most methods
 - o Over 90% of all rail-related attempts result in death
- Nearly 70% of Metra's fatalities are confirmed or suspected suicides
 - Chicago has a higher percentage of train fatalities (passenger + freight) than the rest of the US (30%)
- Rail suicide is often a 'public event'
 - Engineers, conductors/brakemen, onlookers, passengers, emergency responders, media, etc.





Mental Health/Suicide Awareness Signs & Partnership







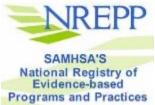


152 conversations



Mental Health/Suicide







Myths and the Facts about Suicide

Myth: No one can stop a suicide, it is inevitable.

Fact: If people in a crisis get the help they need, they will probably never be suicidal again.

Myth: Confronting a person about suicide will only make them angry and increase the risk of suicide.

Fact: Asking someone directly about suicidal intent lowers anxiety, opens up communication and

lowers the risk of an impulsive act.

Myth: Only experts can prevent suicide.

Fact: Suicide prevention is everybody's business, and anyone can help prevent the tragedy of suicide

Myth: Teenagers have a higher risk of suicide.

Fact: Suicide doesn't discriminate. No age group is immune. Risk is highest for middle-aged adults.

Myth: Suicidal people keep their plans to themselves.

Fact: Most suicidal people communicate their intent sometime during the week preceding their attempt.

Myth: Those who talk about suicide don't do it.

Fact: People who talk about suicide may try, or even complete, an act of self-destruction.

Myth: Once a person decides to complete suicide, there is nothing anyone can do to stop them.

Fact: Suicide is the most preventable kind of death, and almost any positive action may save a life.



Suicide Clues and Warning Signs

Behavioral Clues

- Nervous/anxious appearance
- Agitation/angry appearance
- Pacing or waiting near the right-of-way
- Waiting on a platform, but never boarding
- Sitting in a parked car along right-ofway or parking lot
- Dressed in dark clothing
- Lack of belongings (backpacks, bags, purses, etc.)
- Standing on the edge of the platform in the yellow tactile area
- Same person exhibiting unusual behavior for multiple days
- For regular passengers: appearance/demeanor suddenly changes (yelling, crying, etc.)

Situational Clues

- Gender (especially male)
- Time of year (between Thanksgiving & the New Year)
- Time of day (morning and evening rush hour)
- Location (official vs. unofficial crossing points)
- Previous suicides (especially if by train → Copycats)
- Calls from municipalities (e.g., police)
- Other passengers' reports/complaints



Q question

Tips for Asking The Suicide Question

If in doubt, don't wait, ask the question Maintain professionalism

- Be genuine and caring
- Judgment/accusations may trigger a customer complaint

Be tactful and sensitive with your approach

- Physical space
- Tone of voice
- Volume of voice

Talk to the person alone, in a private setting

• If appropriate, move to the vestibule

Remember: How you ask the question is less important than that you ask it

Less Direct Approach:

- "Have you been unhappy lately?"
- "Have you been very unhappy lately?"
- "Have you been so very unhappy lately that you've been thinking about ending your life?"



P persuade & R refer

P persuade

- Listen to the problem and give them your full attention
- Remember, suicide is not the problem, only the solution to a perceived insoluble problem
- Do not rush to judgment
- Offer hope in any form

Then Ask:

"Will you let me help you get some help?"

YOUR WILLINGNESS TO LISTEN AND TO HELP CAN REKINDLE HOPE, AND MAKE ALL THE DIFFERENCE.

R refer

The QPR model can be used in personal or professional contexts

- In your professional role, Metra is leaving the choice of your intervention up to you.
- Suicidal people often believe they cannot be helped, so you may have to do more.
- The best referral involves connecting the person directly to professional help.
 - Call Metra Police at (312) 322–2800. Local police if the threat is imminent.
 - If the threat does not seem to be imminent and the person is an employee of Metra, call EAP
- ✓ DO NOT leave a suicidal person alone
- ✓ DO NOT treat the person as a criminal
- ✓ DO NOT intervene if the person starts behaving aggressively or has a wea



Breaking the Silence - Restoring Hope, Saving Lives

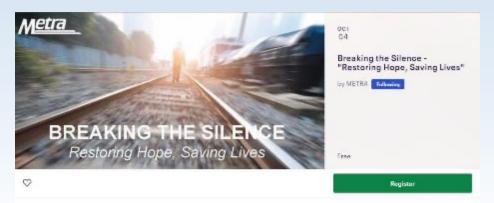




Networking Reception October 3, 2019



Trespasser & Mental Health Awareness Symposium October 4, 2019



Description

Breaking the Silence - "Restoring Hope, Saving Lives" A Railroad Trespasser & Suicide Prevention Symposium

Two years ago, Motro hosted its first brannial symposium "Breaking the Silence" focusing on ruining prevention and promoting mental health within the rell industry.

Trespesser deaths and suicides by train have devestating consequences for families, train engineers and conductors involved in dualing with the atterment of such involveds, as well as witnesses. Metin and other nationals throughout the United States, Canada and the United Kingdom have worked to implement programs designed to reduce trespesser deaths, solicides and solicide attempts through awareness comparigns, educating employees, interventions and promoting mental health.

This year's symposium, Breaking the Silence - "Restoring Hope, Saving Lives" will bring together our international partners, the British Transport

Date And Time

Fri, Dotober 4, 2019 7 30 AM - 4:00 PM CD1 Add to Calendar

Location

Illinois Institute of Technology, Kent College of Law 555 W. Adams Chibago, Illinois 50881 View Map



Sharing, Collaborating & Partnerships

Partnerships and Sharing in Best Practices

- DuPage Railroad Safety Council
- American Public Transportation Association (APTA)
- Commuter Rail Coalition (CRC)
- Volpe, National Transportation Systems Center
- Federal Railroad Administration (FRA)
- The Association of American Railroads (AAR)
- Peer Transit Agencies
- National Suicide Prevention Lifeline
- Crisis Text Line
- Cook County Department of Transportation & Highways
- Chicago Metropolitan Agency for Planning (CMAP)



Thank you



If you have questions, please type them in the chat or provide an email.

Hilary E Konczal Metra Chief Safety & Environmental Officer

Email: <u>Hkonczal@metrarr.com</u>

Phone: 312-322-6743





Northeast Illinois

Railroad Trespassing Prevention Webinar



Railroad Trespassing & Suicide Prevention Treatments



Mr. Francesco Bedini Jacobini joined the FRA in 2017 where he currently serves as Program Manager for Grade Crossing and Trespass Research within the FRA's Office of Research, Development and Technology. He previously worked for four years with the Illinois Department of Transportation on the Chicago to St. Louis High Speed Rail project. He holds Bachelor and Master of Science degrees in Civil Engineering, both from the University of Illinois at Urbana-Champaign.



Dr. Shala Blue is an Engineering Psychologist in the Human Factors Research Division, of Office of Research, Development, and Technology. Dr. Blue joined FRA in 2020 and is the Program Manager for the Trespass and Suicide Prevention Human Factors research portfolios. The main goal of these portfolios are to reduce the number of rail-related casualties that are due to trespass and suicide.



Trespass Database (Rutgers University)

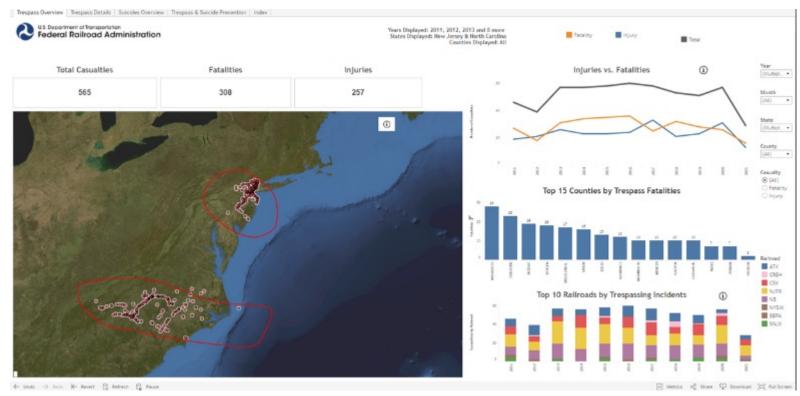
Eight months of data collection in 2021 at four different locations

- Ramsey, NJ
- Thomasville, NC (2)
- Ashland, NJ

33,797 trespassing events



Number of trespass casualties 2011 – 2021: 565



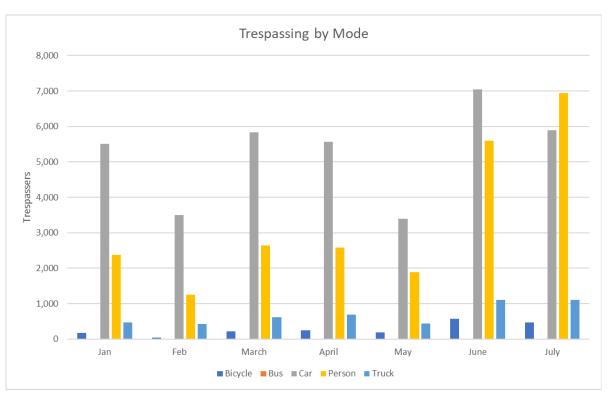


https://explore.dot.gov/t/FRA/views/TrespassandSuicideDashboard/



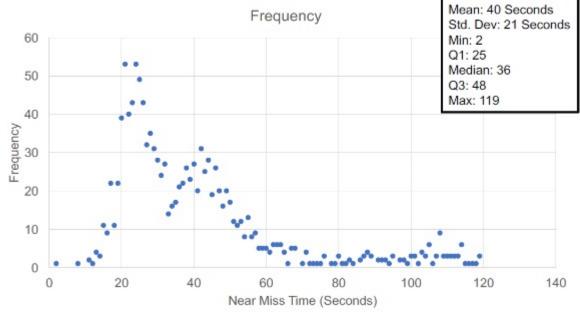
Trespass Casualties are Just the Tip of the Iceberg:

Trespassers by Type (Rutgers)



Near Miss Distribution (Rutgers)

Ramsey Trespass Event Near-Miss Time Distribution: July 2021





Railroad Trespassing & Suicide Prevention Treatments



Marco daSilva
USDOT Volpe Center

Mr. Marco daSilva is a Senior Engineer at the U.S. Department of Transportation (USDOT) Volpe Center in Cambridge, Massachusetts. His work portfolio includes management of the Volpe Center's Highway-Rail Grade Crossing and Trespass Research program in support of the Federal Railroad Administration. Mr. daSilva holds a Bachelor's degree in Mechanical Engineering from Boston University and a Master's degree in Transportation Engineering from Northeastern University.



C.A.R.E.: Community, Analysis, Response, and Evaluation

Community Trespassing Prevention Guide			
December 2011			
OF TRANSPORTATION POLITICAL NOT A TRANSPORTATION POLITICAL NOT A TRANSPORTATION OF T			
U.S. Department of Transportation Federal Railroad Administration			
Office of Railroad Safety			

Community	Analysis	Response	Evaluation
Identify and describe the trespass problem. Identify community resources and begin involvement. Organize a problem-solving committee with community stakeholders and develop an action plan.	Develop data collection and analysis plan. Collect trespass data. Analyze the data to determine the underlying causes of the trespass problem. Establish baseline and identify measures to determine program's effectiveness.	Identify and implement feasible countermeasures - Develop countermeasures (CM) implementation plan. - Implement CM, such as: education, enforcement, engineering, and other strategies developed by the committee.	Assess impact of the response, and determine whether the trespass problem was displaced, reduced, unchanged, or eliminated. Evaluate the process used and assess whether the key stakeholders were identified and included, the underlying causes correctly identified, the response implemented as planned, and reasons why parts of the plan may not have been implemented. Develop and implement a long-term program monitoring plan if needed.



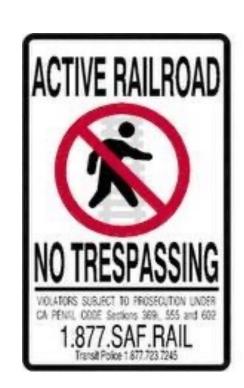
Goal

- Create safer communities by fostering the development of long-term trespass prevention strategies through collaborative community problem-solving partnerships.
- It's a <u>collaboration</u> between different entities, it is a shared responsibility between railways and other stakeholders.



Strategy

- "Problem-solving model designed to provide a step-by step approach for addressing railway trespassing issues in communities."
- "Based on lessons learned during actual collaborative community problem-solving projects."
- Help solve existing trespassing problems or potential trespass issues resulting from re-zoning or planned construction.
- Dissemination of good practices can make the difference.





C.A.R.E.: Community, Analysis, Response, and Evaluation

Step 1 – Community

- Identify the trespassing problem in the community and potential community stakeholders.
- Develop a general statement to describe the problem. (e.g., children are crossing the railway tracks where the street dead ends at the tracks.)
- Organize a community problem-solving meeting to discuss the issues and develop an action plan for your Trespass Prevention Program.



Stakeholder group in West Palm Beach, FL Trespass Study (2010-2012)



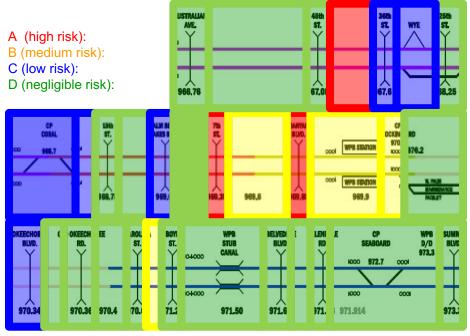


Step 2 – Analysis

Collect more detailed information about the trespassing problem and determine its underlying causes.

Examples of information:

- Incident data from the law enforcement partners
- Trespass site surveys
- Trespasser survey by law enforcement partners
- Locomotive and stationary video data
- Train crew interviews by railroad officials
- Survey of residents, businesses, and schools at problem locations





Step 2 – Analysis (continued)

Answer the following in as much detail as possible:

- •<u>Who</u> is trespassing, and what are their ages? (students, residents, workers...)
- What are they doing while on the tracks? (walking, crossing the tracks, riding a bicycle, playing, drinking...)
- •When does it happen: time, day of the week, month, season?
- Where are they entering an exiting the railroad property? Where are they going? Coming From? Where is the desired path?
- •<u>How</u> are they entering and exiting the railroad property? (no barrier present, hole in fence, climbing, jumping, at a crossing...)



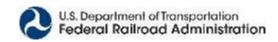




Step 2 – Analysis (continued)

- Determine the underlying cause(s) of trespassing
 - •Analysis of information collected and analysis of common factors (time, location, point of entry, or point of exit...)
- Develop statement describing the underlying cause(s) in detail and a goal to describe what you want to achieve from the program.
- Identify scale of the problem:
 - Large scale: whole community or many organizations needed to solve
 - Medium scale: focused group can solve
 - Small scale: one or two people or organizations can solve
- Identify measures that will be used to determine effectiveness of the program (trespass reduction/elimination, increased public awareness...)





Step 3 – Response

Identify and implement the most effective and feasible response(s) that will help solve the underlying cause(s) of trespassing:

- Education (e.g. school presentations, media, other)
- Engineering or Environmental Design (e.g. fences, signs, crossing)
- Enforcement
- Other Strategy
- Implement the plan





Step 4 – Evaluation

Process: Determine if the process was effective and why or why not.

- Were the key stakeholders and resources identified and included?
- Were the underlying causes correctly identified?
- Was the response implemented as planned? If not, why?
- Was any part of the plan not implemented? Why?
- Was the trespass problem displaced, reduced, unchanged, or eliminated?

Based on the implemented response, will this project require a long-term commitment and monitoring? Who will need to be involved? What could happen if the response is left in place? What could happen if it's taken away?





Summary

- •The approach is collaboration between different players, it is a shared responsibility between railways and other stakeholders.
- Dissemination of good practices can make the difference.
- Guide Implemented and Evaluated in a research study in the city of West Palm Beach, FL from 2009-2013.

Guide: https://www.fra.dot.gov/eLib/Details/L02716

Research Report: https://www.fra.dot.gov/eLib/details/L05307

Research Article: http://onlinepubs.trb.org/onlinepubs/trnews/trnews322TrespassPreventionModel.pdf





Rail Trespass Treatments/Countermeasures

- Detection and Warning
- □ Anti-trespass technologies/treatments

□ Education Initiatives

□ Enforcement Strategies











Detection and Warning

Fixed Systems

PTZ cameras, includes a speaker and microphone

Uses video motion detection as a sensor

Live video fed into police dispatch center

Dispatchers can control PTZs and speak to trespassers

Sensors or Machine Learning (ML) algorithms

Research Report (2020): https://rosap.ntl.bts.gov/view/dot/50849

Mobile (drone) Systems

Mobile camera on a drone by the police

Provide coverage over a significant amount of ROW

Used to identify and track trespassers in areas of the ROW that are difficult to access by the police.

Research Report (2020): https://rosap.ntl.bts.gov/view/dot/50848









Anti-Trespass Technologies/Treatments

Non-crossing Locations

- Warning Signs
- Right-of-way Fencing
 - Effect of three countermeasures against the illegal crossing of railway tracks: Fencing reduced trespassing by 94.6 percent, landscaping 91.3 percent and prohibitive signs 30.7 percent
 - High-Security Fencing for Rail Right-of-way Applications Research Report (2015): https://rosap.ntl.bts.gov/view/dot/12237
- Landscaping
- Obstruction removal to increase visibility
- Grade Separation





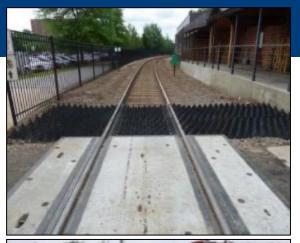




Anti-Trespass Technologies/Treatments

At Crossings

- Anti-Trespass Guard Panels
 - Anti-trespass guard panels reduced the number of pedestrians who trespassed on railroad ROW by 38 percent. (Report 2019: https://rosap.ntl.bts.gov/view/dot/41716)
- Pedestrian Gate Skirts & Channelization
 - 56 percent reduction in pedestrian violations while the gates were descending; 19 percent reduction in pedestrian violations while the gates were horizontal. (Report 2020: https://rosap.ntl.bts.gov/view/dot/53572)
- Right-of-Way Incursion Treatments
 - Pavement markings through the crossing and reflective markers and flexible delineators on both sides and in between the tracks.
 - 85 percent reduction in frequency of vehicles turning onto the tracks in initial study. (Report 2018: https://rosap.ntl.bts.gov/view/dot/37006)









Enforcement Strategies

Law Enforcement Strategies for Preventing Rail Trespassing Research Report (2016): https://rosap.ntl.bts.gov/view/dot/12258

Law Enforcement Strategies for Reducing Trespassing Pilot Grant Program Results (2020): https://rosap.ntl.bts.gov/view/dot/53546



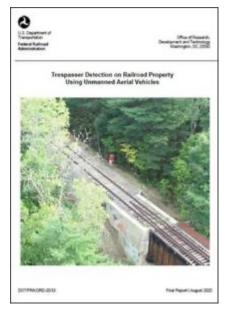


FRA References

- FRA Research Repository: https://railroads.dot.gov/elibrary-search
- FRA's National Strategy for Trespass Prevention on Railroad Property: https://www.fra.dot.gov/eLib/Details/L19817
- RosaP: https://rosap.ntl.bts.gov/













FRA Human Factors Division: Railroad Trespassing Prevention

PROJECT DESCRIPTION

- This research seeks to better understand the leading cause of rail-related death in the U.S.
- Improve understanding of the causal factors behind why individuals contemplating suicide consider this method to end their lives.
- Identify countermeasures to prevent accidents attributable to trespassing. Identify and plan new efforts to support FRA rail trespass prevention.

Sample Acquisitions:

- 1. Trespass and Suicide Prevention Toolbox: Develop an online portal of trespass and suicide prevention tools and countermeasures tailored for the implementation needs of rail carriers.
- 2. Development of Railroad Trespassing Database Using Artificial Intelligence (AI): Develop pilot trespassing database using AI; feasibility/proof of concept study of real time video data using AI.
- 3. Training of Railway Staff on Trespasser Strikes Using a High Fidelity Simulator: Work with a partner railroad to understand how iPads may be used to reduce trespass strikes.



FRA Human Factors Division: Railroad Suicide Prevention



• TThis research area explores ways to reduce the number of suicide casualties that occur on the railroad ROWs.

<u>Sample Acquisitions</u>:

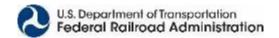
- 1.Data Quality Improvements: Continue to gather information about the prevalence of suicides on rights-of-way (ROWs), as well as demographic characteristics of individuals involved and characteristics of time and location that may impact countermeasure development.
- 2. Countermeasure Development, Implementation, and Evaluation: Work with railroad carriers to implement pilot tests of various countermeasures to understand which could mitigate suicides on ROWs. Develop rail-specific guidelines for reporting suicides on ROWs.
- 3. Outreach: Work with U.S. and international stakeholders to better understand how to improve public discussion of railroad suicide incidents.



FRA & Volpe Railroad Suicide Prevention

- 1. Data Analysis
- 2. Countermeasure Development, Implementation, and Evaluation
- 3. Outreach





FRA & Volpe Railroad Suicide Prevention

- 1. Data Analysis
- 2. Countermeasure Development, Implementation, and Evaluation
- 3. Outreach





Railroad Suicide Prevention: U.S. Outreach

Suicide Prevention for US Rail (SPUR) Working Group Background: Spinoff of Global Railway Alliance for Suicide Prevention (GRASP)

Who: Railroad (commuter rail) representatives and others with knowledge or insight about suicides on US railroad ROWs

Purpose: To better understand why trespass and suicides occur on rail, identify effective mitigation strategies, reduce prevalence, and improve rail safety by generating conversation and information-sharing among commuter railroad carriers about suicide and trespass prevention.

First Meeting: November 2021



Local Crisis Center!



Railroad Suicide Prevention: U.S. Outreach

Invitation: Suicide Prevention for US Rail (SPUR)
Working Group

If you would like to get involved or get more information,
please contact:

Scott Gabree: Scott.Gabree@dot.gov

Stephanie Chase: Stephanie.Chase@dot.gov



FRA Railroad Suicide Prevention Research Program

Shala Blue, PhD

Human Factors Division
Office of Research, Development, and
Technology
Federal Railroad Administration
(202) 493-0168

Shala.Blue@dot.gov

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Railroad Trespassing, Tools, & Funding Solutions



Scott Gabree
USDOT Volpe Center

Scott Gabree joined the Volpe Center in 2009 and is the manager of the research program for grade crossing safety and trespass prevention for Volpe's Transportation Human Factors Division. The trespass prevention program seeks to better understand trespass and suicide incidents on the U.S. rail system and what rail carriers may be able to do, in coordination with other groups, to help reduce the frequency and impact of these events. Scott and his team at Volpe are currently working with several rail carriers from around the country to try to improve our understanding of rail suicide.

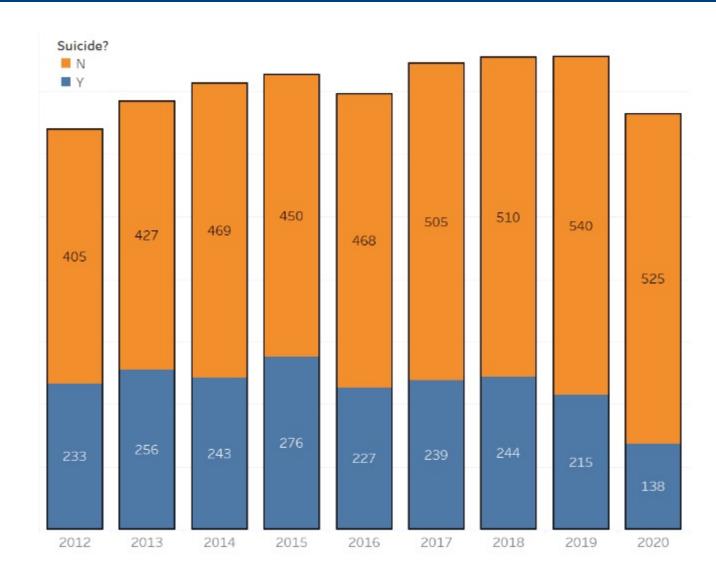


FRA Data: Trespass and Suicide in the United States

 Over 630 fatalities per year due to trespass or suicide

Over 32% confirmed suicides

Trending up



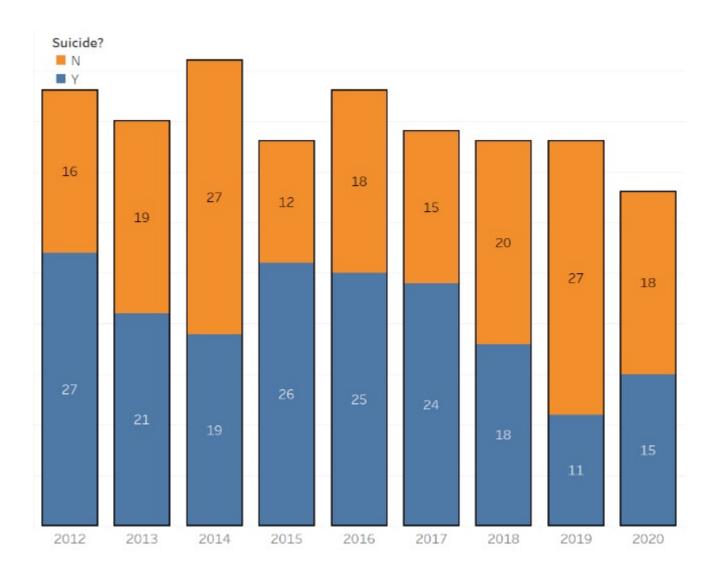


FRA Data: Trespass and Suicide in IL

 Over 35 fatalities per year due to trespass or suicide

Over 51% confirmed suicides

 Flat trend, proportion that are suicides trending down



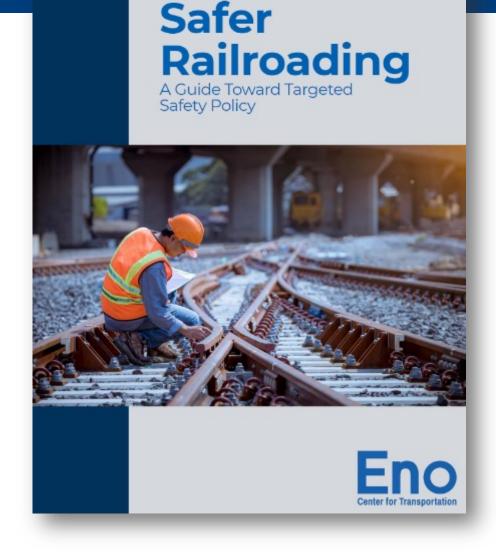


Challenges for Prevention

 Many driving factors stem from societal issues and may require collaboration with new partners

 A combination of approaches and not a single approach is most likely necessary for many situations

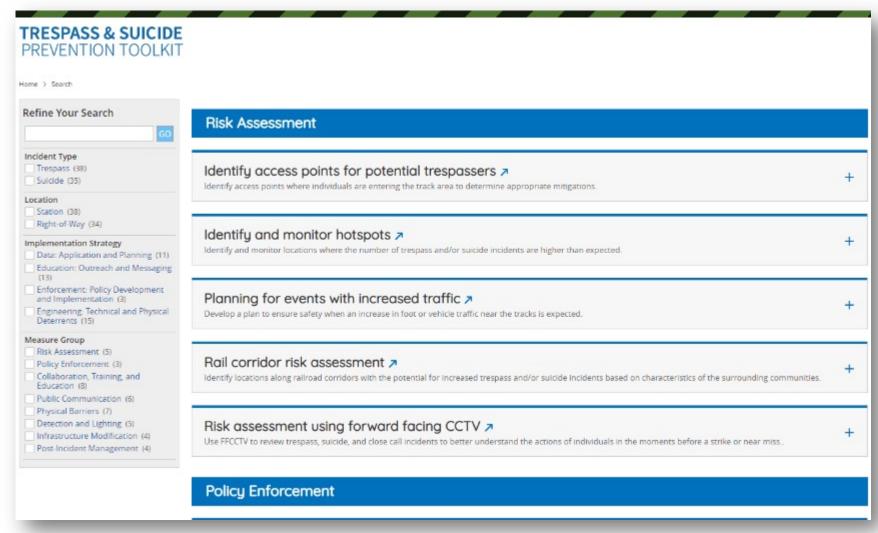
 Mitigations are often implemented quickly without evaluation

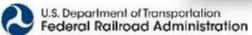






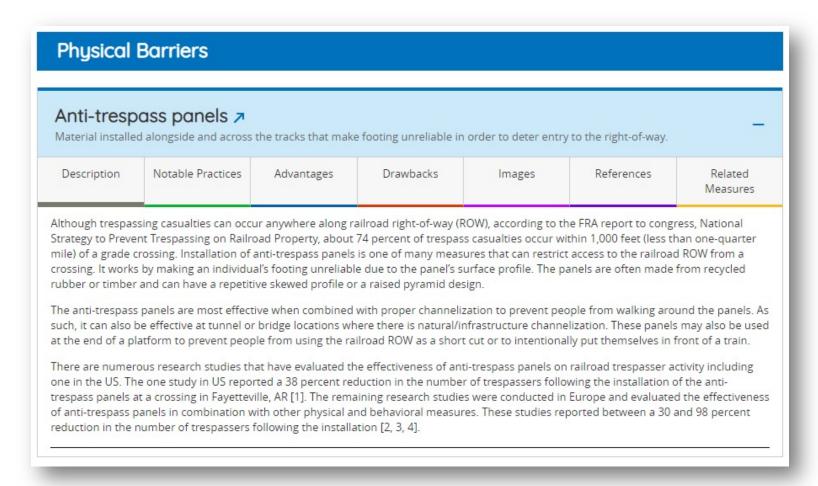
FRA Trespass and Suicide Prevention Toolkit

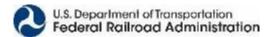




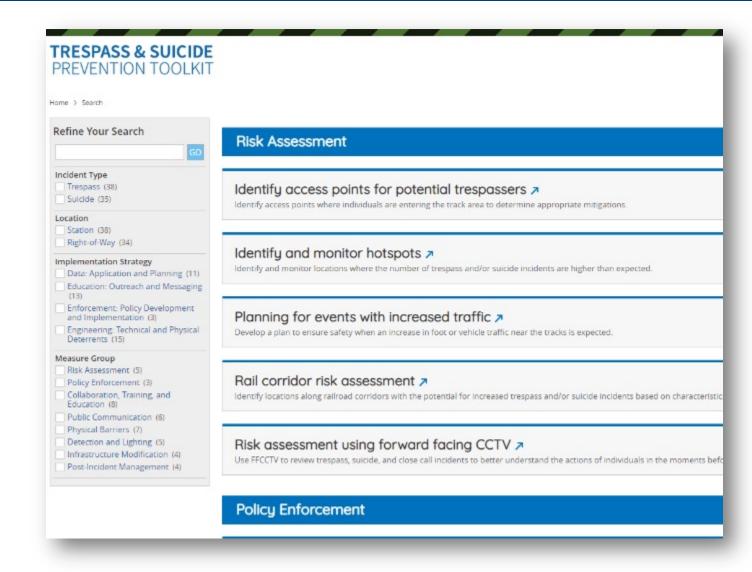
FRA Trespass and Suicide Prevention Toolkit

- For each type of measure, 7 tabs with information
 - Description
 - Notable Practices
 - Advantages
 - Drawbacks
 - Images
 - References
 - Related Measures



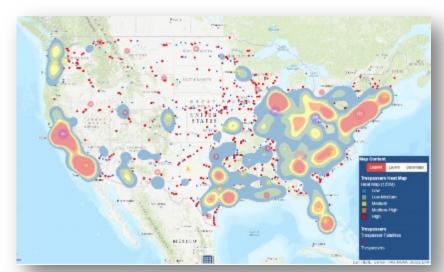


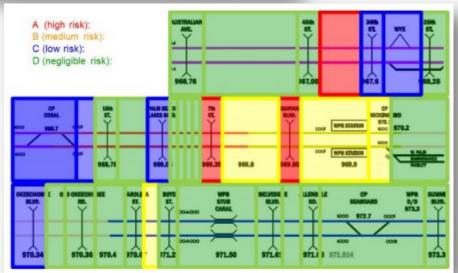
- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaboration with partners
 - Educate staff/ridership
- Enforcement
 - Identify those at risk





- Data
 - Understand the issue
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
 - Develop and enforce policies



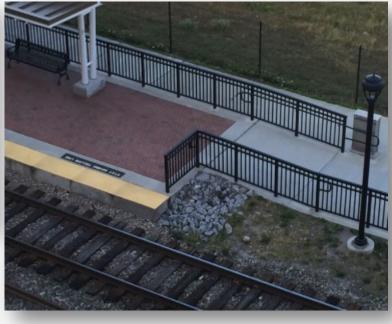




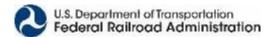
- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
 - Develop and enforce policies











- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
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Rail Trespass and Suicide Prevention

- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
 - Develop and enforce policies









Rail Trespass and Suicide Prevention

- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
 - Develop and enforce policies







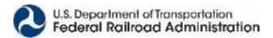


Rail Trespass and Suicide Prevention

- Data
 - Understand the problem
- Engineering
 - Restrict access to ROW
 - Detect access to ROW
- Education
 - Collaborate with partners
 - Educate staff/ridership
- Enforcement
 - Develop and enforce policies







Multifaceted Approach

- Multiple strategies to truly address issues
- Informed by data
- Evaluation (e.g., CARE)
- Collaborations with outside groups

















Engagement Data-Driven

Evaluation Collaboration



Highway-Rail Grade Crossing & Trespass Prevention Research Program



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Railroad Trespassing & Suicide Prevention Funding Opportunities



Sam Wright
Freight Planner
Cook County DOTH

- FY21 CRISI Grants to Reduce Railroad Trespassing
- Illinois Funding Opportunities



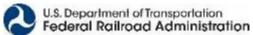


USDOT Finding Opportunities

John Winkle Federal Railroad Administration

John Winkle is a Senior Grants Manager in the Office of Railroad Policy & Development (RPD). He has worked at FRA for over 24 years, the first eight of which were in the Chief Counsel's Office in the Safety Law Division. John came to FRA straight out of law school, and since joining RPD, has been the grant manager for the Amtrak grant program, an Environmental Protection Specialist, and a grants manager. He graduated from the University of Maryland at College Park with a degree in Finance and got his law degree from Catholic University in Washington, DC. He resides in our nation's capitol with his wife and two daughters.







\$362M

In available funding

The Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant Program

For projects that improve the safety, efficiency, and/or reliability of intercity passenger and freight rail systems

\$25M

CRISI set-aside targeting trespassing

\$2.3M

Non-CRISI funding to reduce trespassing

Available funding for trespassing mitigation projects has been folded into the CRISI Grant Program under Track 4



FY21 CRISI – Grants to Reduce Railroad Trespassing



CRISI Set-Aside: \$25M	For projects for capital and engineering solutions targeting trespassing
Railroad Trespassing Enforcement Grant Program: \$2,034,296	For railroad trespassing enforcement activities at trespassing hot spots
Railroad Trespassing Suicide Prevention Grant Program: \$207,000	For the implementation or expansion of targeted outreach campaigns to reduce the number of railroad-related suicides



FY21 CRISI – Grants to Reduce Railroad Trespassing



CRISI Funding

\$25M Set-Aside

- For projects for capital and engineering solutions targeting trespassing located in counties with the most pedestrian casualties as identified in <u>FRA's National Strategy to</u> <u>Prevent Trespassing on Railroad Property</u>
- No predetermined minimum or maximum dollar thresholds



FY21 CRISI - Grants to Reduce Railroad Trespassing

Non-CRISI Funding

Railroad Trespassing Enforcement Grant Program \$2,034,296

- For railroad trespassing enforcement activities at trespassing hot spots on FRA-regulated track
- Funds only hourly wages for law enforcement officials
- Maximum grant award \$120,000, with no minimum
- No non-Federal match required; <u>Federal share of total</u> <u>project costs can be up to 100%</u>
- Applicants must meet the CRISI Grant Program eligibility requirements



Applicants must include the following information:

- Date, time, number of officers
- Location and description of Enforcement Activity
- Justification or reason for selected enforcement activity
- Number of contacts (encounters with trespassers)
- Number of warnings and/or citations issued
- Deterrence effect of such activities and method for measuring such deterrence (including explanation of how they determine deterrence effect)



FY21 CRISI – Grants to Reduce Railroad Trespassing

Non-CRISI Funding

Railroad Trespassing Suicide Prevention Grant Program *\$207,000*



- For the implementation or expansion of targeted outreach campaigns to reduce the number of railroad-related suicides that involve railroad trespassing on FRA-regulated track
- Maximum grant award \$100,000
- No non-Federal match required; <u>Federal share of total project</u> <u>costs can be up to 100%</u>
- Applicants must meet the CRISI Grant Program eligibility requirements

Trespass Suicide Prevention Activities

- Applicants must include indicators of success (e.g., anticipated reach of messaging efforts or contacts made by personnel with individuals at risk or reduced suicide incidents)
- FRA maintains the right to re-publish and use information under this grant for the advancement of safety



Eligible Applicants

- A State or group of States
- Public agencies or publicly chartered authorities
- Local governments
- Amtrak or other intercity passenger rail carrier
- Class II or III railroads
- Rail carrier or equipment manufacturer partnering with a state or local government entity
- The Transportation Research Board (TRB) together with any contractor to develop railrelated research
- A university transportation center for rail-related research
- A non-profit labor organization

Eligible Projects

- Wide Range of Rail Capital Projects--including grade crossings, track and bridges, equipment
- Railroad Safety Technology
- Track, Station, and Equipment Improvements for Intercity Passenger Rail
- Grade Crossing Improvements
- Rail Line Relocation and Improvement
- Regional, State, Corridor Planning and Environmental Analyses
- Safety Programs and Institutes
- Research, Workforce Development, and Training

At least 25% of funds is reserved for rural projects



Evaluation Criteria

- Technical Merit: SOW aligns with expected outcomes, project readiness, technical capacity of applicant to carry out proposed project, innovative overall approach, consistency with planning documents
- **Project Benefits:** Effects on system performance, safety, integration with other modes, ability to meet demand

Selection Criteria

- Preference:
 - Federal share of total project costs is 50 percent or less
 - Maximized net benefits
 - Pre-construction elements for new intercity passenger rail routes set-aside
 - Projects targeting trespassing in areas with documented incidences



Key Departmental Objectives

DOT will assess the project's ability to meet one or more of these objectives. Such considerations can include, but are not limited to, the extent to which an application:

Safety

Improves safety at highway-rail grade crossings, reduces incidences of rail-related trespassing, and upgrades infrastructure to achieve a higher level of safety.

Equitable economic strength, improving core assets Invests in vital infrastructure assets, addresses capital

Invests in vital infrastructure assets, addresses capital needs to connect farms, factories, and shippers to the rail network, and provides opportunities for families to achieve economic security through rail industry employment.

Resilience, addressing climate change

Reduces emissions, promotes energy efficiency, increases resiliency, and recycles or redevelops existing infrastructure.

Racial equity, economic inclusion

Improves or expands transportation options, mitigates the safety risks and detrimental quality of life effects that rail lines can have on communities, and expands workforce development and training opportunities to foster a more diverse rail industry.

Transformation of our nation's transportation infrastructure

Adds capacity to congested corridors, builds new connections, and ensures assets will be improved to a state of good repair.



What is a NOFO?

Notice of Funding Opportunity (NOFO)

A Notice of Funding Opportunity (NOFO):

- Announces the grant opportunity
- Contains details about the application requirements and procedures to request Federal funding for eligible projects
- See the <u>FY 2021 Notice of Funding Opportunity</u> in the Federal Register





What information is in a NOFO?

Key Parts of a NOFO

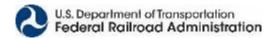
- Program summary
- Key Dates
- Addresses
- FRA Contact Information
- Table of Contents
 - Program Description
 - Federal Award Information
 - Eligibility Information
 - Application and Submission Information
 - Application Review Information
 - Federal Award Administration Information
 - Federal Awarding Agency Contacts



How do I Apply?

Key Steps

- Obtain a Dun and Bradstreet number (DUNS)
- Register early in the Federal government's System for Award Management (SAM)
 - NOTE: SAM registration can take up to 2 weeks
- For Grants.gov, complete an Authorized Organization Representative profile and create a username and password
- Submit an application addressing all requirements outlined in the NOFO



Grant Application Process Information





Grant Awards

- FRA anticipates making multiple awards with the available funding
- FRA may not be able to award grants to all eligible applications even if they meet or exceed the stated evaluation criteria (see Section E of NOFO, Application Review Information)
- Projects may require more funding than is available
 - Applicants should propose projects or components of projects that have operational independence and can be completed and implemented with funding under this NOFO as a part of the total project cost together with other, non-Federal sources.





Illinois Funding for Crossing & Trespassing Safety Projects

Brian Vercruysse is the Rail Safety Program Administrator with the Illinois Commerce Commission. He started with the ICC in 2000, and is responsible for managing the Commission's Inspection, Rail Safety Education & Outreach, and Crossing Safety Improvement Programs. Prior to the Commission, Brian worked for the Illinois Department of Transportation from 1992 to 2000. Brian is a Professional Engineer in the State of Illinois and graduated from Purdue University in 1994. Brian lives in the Village of Lombard and has enjoyed his service to all areas of the State of Illinois.



Brian Vercruysse
Illinois Commerce Commission



Programs of the Railroad Safety Section Focus – Trespass Mitigation Update





Topics for Discussion



Illinois Commerce Commission - Rail Safety Main Timeline

ICC Jurisdiction and Staffing (Transportation Bureau – Rail Safety Section)

Crossing Types & Illinois Statistics

PROGRAMS

- 1. Crossing Safety Improvement Program
- 2. Inspection Program (Safety Assurance & Compliance)
- 3. Education & Outreach (Public Awareness)
- 4. Railroad Worker Safety

150 Years of Rail Safety

https://www.icc.illinois.gov/home/centennial



Illinois Rail Safety Main Timeline

1871 – The Railroad and Warehouse Commission

1913 – Public Utilities Commission

1921 – Illinois Commerce Commission

1937 - General Order 138 - crossing protection requirements

1955 - Grade Crossing Protection Fund

1970 - Federal Railroad Safety Act (FRA)

1980 - The Staggers Rail Act (Deregulation of U.S. Rail Industry)

1995 – Interstate Commerce Commission Termination Act (STB established)

1995 - Fox River Grove School Bus / Metra Train Crash (7 fatalities)

1999 - Bourbonnais, Illinois, Freight train / Truck Crash (11 fatalities)

ICC – Rail Safety Section Staffing

Project Managers/Civil Engineers (6)

Public Highway-Rail Crossings, Safety Projects & Complaints Traffic Signal Operations/Interconnects

Railroad Safety Inspectors – FRA Certified

Track (3)

Signals & Train Control (3)

Hazardous Materials Shipments (2)

Operating Practices (1)

- Public Education & Enforcement Operation Lifesaver (1)
- Analyst Data, Research, and Policy Expertise (1)
- <u>Docketing</u>, Intake, Asst. Project Management (1)
- 2 Part Time



Transportation Regulatory Fund provides the revenue: (Grade Crossing Protection Fund and Railroad fees for number of crossings and miles of track)

Statewide Distribution

Staff Composition:

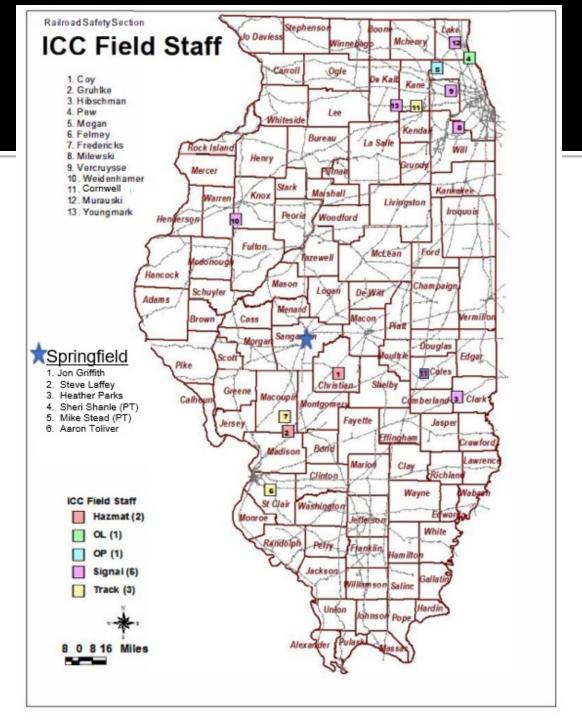
Civil and Mechanical Engineers

Masters' Data, Policy & Research

Past Railroad Managers

(10 to 25 years experience)

(21 FT Authorized; 17 FT Current; 2 Part Time).



ICC Jurisdiction – State Statutes

Public Highway-Rail Crossings

Rail Carriers, Railroads, Highway Agencies Funding for Local Roads and Streets

625 ILCS 5-18c/7401

https://www.icc.illinois.gov/cc/authority.aspx

35 ILCS 505 - Motor Fuel Tax Law

Establishes IL Grade Crossing Protection Fund

RTA Act

Railroad/Crossings <u>owned</u> by Northeastern Illinois Railroad Corporation (Metra) & CTA

Intergovernmental Agreements in place

Illinois Administrative Code

92 IAC 1500 – Structures / Clearances

92 IAC 1535 - Crossings of Rail Carriers and Highways

92 IAC 1536 – Grade Crossing Opening or Closure

92 IAC 1545 - Sanitation and Shelter Facilities RR Workers

92 IAC 1546 - Employee Walkways in Railroad Yards

92 IAC 1550 – RR Employee Transport Vehicles

http://www.ilga.gov/commission/jcar/admincode/o92/o92parts.html

Each part has specific requirements for Rail Carriers and Highway Agencies.

Illinois Administrative Code Examples 92 IAC 1500 – Structures / Clearances

SUBPART A: GENERAL RULES

Section 1500.10 Scope

- •Section 1500.15 Incorporations by Reference
- •Section 1500.20 General Requirements

SUBPART B: STEAM RAILROADS: TRACK CENTERS

Section 1500.110 Main Tracks

- •Section 1500.120 Tracks Adjacent to Main Tracks
- •Section 1500.130 Subsidiary Passenger Tracks
- •Section 1500.140 Subsidiary Freight Tracks
- •Section 1500.150 Ladder Tracks

SUBPART C: STRUCTURAL CLEARANCES

Section 1500.160 Bridges

- •Section 1500.170 Buildings and Miscellaneous Structures
- •Section 1500.180 Awnings and Canopies
- •Section 1500.190 Overhead Loading Platforms
- •Section 1500.200 High Freight Platforms
- Section 1500.210 High Passenger Platforms
- Section 1500.220 Low Passenger Platforms
- •Section 1500.230 Switch Stands
- •Section 1500.240 Low Switch Stand Dwarf Signals, Signal Apparatus, etc.
- •Section 1500.250 Pen Stocks and Water Tanks (Repealed)
- •Section 1500.260 Semaphore Signals
- •Section 1500.270 Poles, Posts and Signs
- •Section 1500.280 Fences
- •Section 1500.290 Mail Cranes (Repealed)
- •Section 1500.300 Building Materials or Supplies
- •Section 1500.310 Overhead Wire Crossings

SUBPART G: CLEARANCE PROCEDURE

- Section 1500.810 Authorization to Construct and Operate
- •Section 1500.820 Form of Application (Repealed)
- •Section 1500.830 Approval of Application (Repealed)
- •Section 1500.840 Hearings (Repealed)

Illinois Administrative Code Examples

PART 1535 CROSSINGS OF RAIL CARRIERS AND HIGHWAYS

SUBPART A: SCOPE AND APPLICATION

Section 1535.5 Incorporations by Reference

- •Section 1535.10 General Order
- •Section 1535.20 Part Not Retroactive
- •Section 1535.30 Requirements for Maintenance of Grade Crossings
- •Section 1535.40 Requirements for Marking and Warning Devices at Grade Crossings
- •Section 1535.50 Requirements for Establishment and Construction of Grade Crossings
- •Section 1535.60 Permission to Install Other Equipment or Devices

SUBPART B: DEFINITIONS

Section 1535.100 Definitions

SUBPART C: ESTABLISHMENT, CONSTRUCTION AND MAINTENANCE OF GRADE CROSSINGS

Section 1535.201 Application for Permission to Extend a Street or Highway

- •Section 1535.202 General Plan or Plat
- •Section 1535.203 Construction and Maintenance of Grade Crossing
- Section 1535.204 Grade Line of Highway Approaches
- •Section 1535.205 Right-of-Way to Be Kept Clear
- Section 1535.206 Crossings and Approaches
- •Section 1535.207 Adjustment of Crossings and Approaches
- •Section 1535.208 Maintenance, Operation and Renewal of Signs, Signals, and Other Warning Devices
- •Section 1535.209 Poles, Structures or Other Objects in Right-of-Way
- •Section 1535.210 Erection and Maintenance of Other Signs
- •Section 1535.211 Provisions of Law (Repealed)

SUBPART D: MARKING AND WARNING DEVICES AT GRADE CROSSINGS

Section 1535.300 Crossbuck Signs

- •Section 1535.310 Advance Warning Signs and Pavement Markings
- •Section 1535.320 Floodlights as Warning Devices
- Section 1535.330 Watchman Warning (Repealed)
- •Section 1535.333 Flashing Light Signals
- Section 1535.335 Location of Signals
- •Section 1535.340 Direction of Indication
- Section 1535.341 Mounting Lamp Units
- •Section 1535.342 Design of Lamps, Hoods, and Backgrounds

SUBPART D: MARKING AND WARNING DEVICES AT GRADE CROSSINGS

Section 1535.343 Warning Indication

- •Section 1535.344 Lenses and Roundels
- •Section 1535.345 Signs on Flashing Light Signals
- •Section 1535.346 Bells on Flashing Light Signals
- •Section 1535.347 Painting
- •Section 1535.348 Power Source
- •Section 1535.349 Manual Operation (Repealed)
- •Section 1535.350 Circuits
- •Section 1535.360 Gates
- •Section 1535.365 Automatic Gates
- •Section 1535.366 Temporary STOP Signs

SUBPART E: CHANGES IN EXISTING CROSSING MARKING OR WARNING DEVICES

Section 1535.400 Procedure Before Commission

SUBPART F: OPERATION OF RAILROAD TRAINS AND CARS OVER GRADE CROSSINGS

Section 1535.501 Sounding of Bell, Whistle or Horn (Repealed)

- •Section 1535.502 Other Warning
- •Section 1535.503 Approaching Grade Crossings Prepared to Stop
- •Section 1535.504 Crew Member to Give Warning at Crossing

SUBPART G: SUBWAYS AND VIADUCTS

Section 1535.601 Order of Commission to Construct Subway or Viaduct

- •Section 1535.602 Petitioner For Permission
- •Section 1535.603 Plans Considered Separately
- •Section 1535.604 Hazard Markers
- •Section 1535.605 Mounting of Hazard Markers
- Section 1535.606 Clearance Signs

Crossing Types

Highway-Rail Grade Crossings (Public)

Highway-Rail Intersection, Grade Crossing, Level Crossing, At-Grade Crossing

Grade Separated Highway-Rail Crossings

Highway-Rail Grade Separation Subway Viaduct

Pedestrian/Rail Crossings

Shared-use Path/Rail Crossing

(at-grade and grade separated)

Highway-Rail At-Grade Crossing

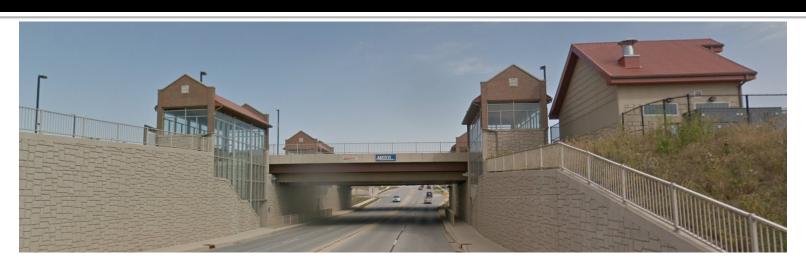
Highway or Street: Includes roadway, sidewalk, multi-use path, or shoulder in the public way.

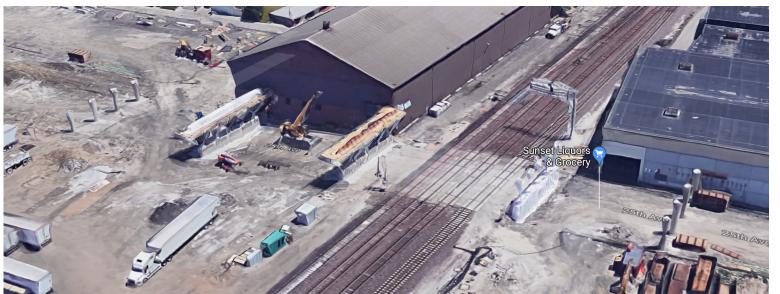


Road Intersections Near Level Crossings State of Illinois



Highway-Rail Grade Separations





Pedestrian Bridge/Tunnel



Pedestrian/Rail At Grade Crossings & Trespassing Concerns

ICC – Jurisdiction / Funding Changes in 2021.

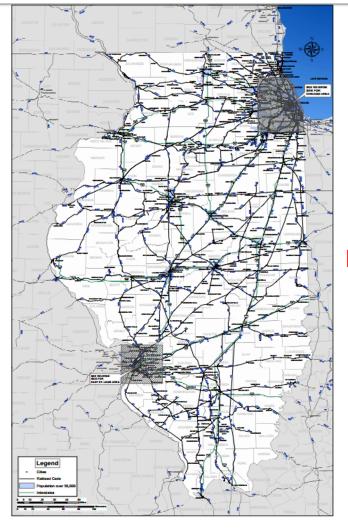








Illinois Rail Statistics



7,400 Miles of Track

147,000 Miles of Highway

7,651 Public Level Crossings

2685
Public Grade Separations

53 Railroad Companies (All 7 Class I RR's in IL)

> 1200 Trains Per Day in Chicago Region 700 passenger/ 500 freight trains



Crash Trend

30-Year Summary		Total Accidents/Incidents		Accide	oyee On ents / Inj Ilnesses	juries /	Train Accidents/Incidents (Not At Xings)					Haz Mat		Highway-Rail Crossing Collisions			sions	Trespass Not at Crossing						
1991 - 2020 as of March 2021	FRA Reporting Railroads	Total Acc/Inc Report	Total Fatalities	Total Injuries	On-duty Fatalities	Total On- duty Injury & Illnesses	Cases with days absent from work	Train Acoldents (Not at Grade - Crossings)	Accidents with reportable damage over \$1M	Train to train Colleions	Train to train Collisions on main line track	Derall ments	On yard track	% on yard track	HazMat Releases	Number of HM Care Releasing	Highway - Rall Crossing Collisions (All Xings)	Total Highway- rall deaths	Total Highway- rall Injuries	Incidents at public xings		Trespass deaths, not at HRC		_
2020	62	527	44	331	2	210		113	3	9	0	75		69.0%	1	1	98	15		84	85.7%	28	27	
2019	63	820	52	525	1	288		188	2	7	1	120		73.4%	2	2	122	21		104	85.2%	27	20	
2018	51	865	40	622	2	305		161	2	10	0	98		76.4%	0	0	110	16		87	79.1%	20	20	
2017	44	864	42	640	1	304	223	147	3	3	1	101	101	68.7%	2	6	112	24		88	78.6%	15		
2016	47	858	38	649	0	339		139	1	6	1	100		72.7%	1	1	120	19			83.3%	18		
2015	51	992	39	733	1	381	281	202	1	10		133		76.7%	1	10	142	22			87.3%	12		
2014	50	1,030	48	758	0	371	286	187	2	16		112		72.2%	1	1	138	21			81.6%	27	19	
2013	50	975	34	717	1	354		184	4	15		122		66.3%	2	2	128	13			81.0%	19		
2012	50	874	40	664	2	353		145	4	13		102		70.3%	1	1	109	17		90	82.6%	16		
2011	49	1,015	48	807	2	378		194		15			147	75.8%	2	10	108	17		92	86.8%	26		
2010	46	1,088	61	827	1	385		175	2	15	2	120		69.7%	1	1	128	28			92.2%	31		
2009	44	1,037	41	821	0	370		181	7	11		135		66.9%	4	18		18		82	77.4%	20	23	4(
2008	46	1,160	71	873	3	416		189	3	16				72.0%	0	0	153	27		131	85.6%	39		
2007	47	1,232	64		1	452		219	2	24				65.3%	1	1	160	29			83.1%	26	35	
2006	56	1,140	53	833	3	392		236	1	20		164		64.8%	2	4	174	25		152	87.4%	25		
2005	56	1,186	54	988	0	430		248	4	22		161	174	70.2%	3	3	180	31		144	80.0%	19	20	
2004	55	1,206	59	849	2	460		273	0	31		164	207	75.8%	2	3	178	28		158	88.8%	25		
2003	55	1,155	58	846	0	487	323	261	8	29		167	186	71.3%	2	8	169	30		150	88.8%	26	29	
2002	51	1,228	58	949	0	542	380	241	1	28		167	158	65.6%	1	1	172	24		155	90.1%	32	26	
2001	49	1,455	73	1,103	3	672		229	0	24		159		61.6%	1	1	212	31			88.2%	39	27	
2000	45	1,484	69	1,109	3	692		231	1	23	6	148		67.5%	1	1	217	31			90.3%	31		
1999	46	1,470	93	1,084	2	682		288	- 5	31	4	186	198	68.8%	4		202	54		178	88.1%	32	29	
1998	43	1,281	70	942	5	679		189	2	17		125	129	68.3%	5	9	199	30		177	88.9%	34		
1997	45	1,331	73	926	1	660	419	251	1	27		176		73.3%	3	3	213	27			89.7%	44	28	
1996	41	1,464	76	1,059	4	739		258	1	29		111	183	70.9%	2	2	232	39			90.5%	32		
1995	39	1,606	91	1,303	5	880	595	248	2	35			161	64.9%	2	5	295	48		268	90.8%	38	38	
1994	40	1,864	97	1,444	1	1,062	756	266	0	39		190	197	74.1%	2	3	337	54		308	91.4%	40	34	
1993	35	1,754	92	1,283	5	984	668	287	1	38	_	100		72.1%	2	10	303	55			92.4%	30	37	
1992	28	1,797	84	1,384	2	1,089	788	219	0	37				66.2%	0		318	45		292	91.8%	34		
1991	26	2,169	95	1,754	3	1,386	1,022	230	0	31	5	152	151	65.7%	3	3	317	47	150	301	95.0%	40	34	72

https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearAccidentIncidentOverview.aspx

850 collisions/year - 1971 300 collisions/year - 1990 ~100 today

Crash Trend

30-Year Summary	Highw	vay-Rai	l Crossi	Trespass Not at Crossing				
1991 - 2020 as of March 2021	Highway - Rail Crossing Collisions (All Xings)	Total Highway- rall deaths	Total Highway- rall Injurles	incidents at public xings	% At Public Crossings	Trespass deaths, not at HRC	Trespass Injuries, not at HRC	Total Trespass Incidents, not at HR0
2020	98	15	31	84	85.7%	28	27	54
2019	122	21	32	104	85.2%	27	20	4
2018	110	16	36	87	79.1%	20	20	3
2017	112	24	32	88	78.6%	15	27	4
2016	120	19	50	100	83.3%	18	18	3
2015	142	22	89	124	87.3%	12	16	2
2014	136	21	54	111	81.6%	27	19	4:
2013	126	13	40	102	81.0%	19	28	4
2012	109	17	40	90	82.6%	16	18	33
2011	108	17	73	92	86.8%	26	28	5
2010	128	28	40	118	92.2%	31	24	54
2009	108	18	50	82	77.4%	20	23	4
2008	153	27	74	131	85.6%	39	28	6
2007	160	29	69	133	83.1%	28	35	6
2006	174	25	74	152	87.4%	25	29	5
2005	180	31	83	144	80.0%	19	20	3
2004	178	28	70	158	88.8%	25	29	5
2003	169	30	71	150	88.8%	28	29	5
2002	172	24	67	155	90.1%	32	26	5
2001	212	31	89	187	88.2%	39	27	6
2000	217	31	68	196	90.3%	31	26	5
1999	202	54	114	178	88.1%	32	29	6
1998	199	30	67	177	88.9%	34	24	5
1997	213	27	85	191	89.7%	44	28	6
1996	232	39	88	210	90.5%	32	30	5
1995	295	48	139	268	90.8%	36	38	6
1994	337	54	189	308	91.4%	40	34	7.
1993	303	55	118	280	92.4%	30	37	6
1992	318	45	123	292	91.8%	34	34	6
1991	317	47	150	301	95.0%	40	34	7:

Trespass Not at Crossing Total Trespass Trespass Trespass deaths, Injuries, Incidents, not at HRC not at HRC not at HRC 41 31 27 43 47 33 51



Topics for Discussion



Illinois Commerce Commission - Rail Safety Main Timeline

ICC Jurisdiction and Staffing (Transportation Bureau – Rail Safety Section)

Crossing Types & Illinois Statistics

PROGRAMS

- 1. Crossing Safety Improvement Program
- 2. Inspection Program
- 3. Education & Outreach
- 4. Railroad Worker Safety

1. Crossing Safety Improvement Program

https://www.icc.illinois.gov/icc-reports/report/CrossingSafetyImprovementProgram

- Grade Crossing Protection Fund (GCPF)
 - Created by the IL General Assembly in 1955 (State Funds)
 - Monthly amount transferred from Motor Fuel Tax Fund
 - \$1.2M/year in 1955 to \$39M/year (current)
- Safety Improvements
 - For public highway-rail crossings on Local Roads & Streets
 - > 5-Year Crossing Safety Improvement Program (CSIP) Since 1999 ICC required by statute to provide annually.
- \$990M+ Authorized by Commission to improve over 6,000 crossings since 1955
 - Focus is generally on new construction or renewal
 - Generally, not used for routine maintenance costs. Exceptions:
 - Vehicle Detection for Four Quadrant Gate Installation
 - Law identifies maintenance for pedestrian structures
 - Maintenance for Trespass Prevention Treatments (2021)
- For next 5-Years Goal is to program/order \$100M/year
 - Rebuild Illinois Capital Bill Funding provided \$78M
 - Cash balance from past years (\$140M+)

Typical Projects Grade Crossing Protection Fund

- Warning Device Upgrades: Installation of automatic flashing light signals (AFLS) and gates
 (AFLS&G) at public grade crossings currently not equipped with automatic warning devices;
 installation of AFLS&G at public grade crossings currently equipped only with AFLS; signal
 circuitry improvements at public grade crossings currently equipped only with automatic
 warning devices;
- Grade Separations New and Reconstructed: Construction, reconstruction, or repair of bridges carrying a local road or street over railroad tracks (overpass); construction from touchdown to touchdown, reconstruction, or repair of bridges carrying railroad tracks over a local road or street (subway);
- Grade Separations Vertical Clearance Improvements: Lowering the existing highway
 pavement surface under a railroad bridge to improve vertical clearance for motor vehicles;
- Pedestrian Grade Separations: Construction of a bridge to carry pedestrian/bicycle traffic over or under railroad tracks;
- Interconnects: Upgrading the circuitry at grade crossings where warning signals are connected to the adjacent traffic signals so that the two systems operate in a synchronized manner;
- Highway Approaches: Improvements to the portion of the public roadway directly adjacent to the crossing surface;
- Connecting Roads: Construction of a roadway between a closed crossing and an adjacent open, improved crossing;
- Voluntary Crossing Closures: Provide an incentive payment to local agencies for the voluntarily closure of public highway-rail grade crossings; and
- Crossing Surface Renewals: Up to \$2 million in assistance annually can be allocated for crossing surface improvements.

Funding for Trespassing Mitigation

102nd GA - AMENDMENT TO HOUSE BILL 2499, FY 22 Budget Implementation Act (Language added from HB 813)

Amend Vehicle Code (625 ILCS 5/18c-7401) to include:

The Commission shall also have power to enter into stipulated agreements with a rail carrier or rail carriers or public authorities to fund, provide, install, and maintain safety treatments to deter trespassing on railroad property in accordance with paragraph (1) of Section 18c-7503 at locations approved by such rail carrier or rail carriers following a diagnostic evaluation between the Commission and the rail carrier or rail carriers, including any public authority in interest or the Federal Railroad Administration, and to order the allocation of the cost of those treatments and their installation and maintenance from the Grade Crossing Protection Fund. Safety treatments approved under this paragraph by the Commission shall be deemed adequate and appropriate.

Also, MFT Law amended and removed cap on funding pedestrian-rail grade separations limiting (no longer \$2M/year).

Grade Crossing Protection Fund

Allowable Projects with Proposed Changes to IL Law

	Warning Device Upgrades
	Grade Separations and Vertical Clearance Improvements
	Pedestrian Grade Separations* (\$2M/year cap removed)
	Traffic Signals Interconnected to railroad warning devices
	Highway Approaches to a railroad crossing
	Connecting Roads
	Voluntary Crossing Closures
	Crossing Surface Renewals
, []	Vehicle detection at four quadrant gate locations*
	Safety Treatments to Deter Trespassing (maintenance also noted*)
	Fencing // Fencing
	Landscaping or other deterrent features
	Monitoring and Notification
	Ground/ path obstacles
	Others, demonstration projects, etc.
S ANN X	
(New)	
*These	are the only sections in the MFT Law where maintenance is noted.

Updated Staff Recommendations Grade Crossing Protection Fund

Grade Crossing Protection Fund (GCPF) Staff Recommended Contribution Changes

Was Highway-Rail Grade Separations (Currently 60% GCPF with maximum \$12M)

New Bridge: Increase to 80% GCPF with maximum \$20M.

Reconstructed Bridge: Increase to 80% GCPF with maximum \$20M.

[For lower cost bridge reconstruction, \$5M or less, 90% GCPF participation may be considered.]

Pedestrian-Rail Grade Separations (MFT law limit of \$2M/year removed).

New Bridge: Increase to 80% GCPF

Voluntary Closure Incentive Payment to Highway Agency/Municipality
Currently \$50K to \$70K. Increase to \$150,000 with review of actual closure costs.

Highway-Rail Warning Devices - Flashing Lights, Signals & Gates

Roadway: Retain <u>95% GCPF</u>, 5% RR with ongoing maintenance

[Single or multiple crossing corridor]

Sidewalk/Path: Retain <u>95% GCPF</u>, 5% Local (pedestrian gates)

Highway Approaches to Grade Crossings – typical 95% GCPF, 5% Highway

Trespass Mitigation Measures – GCPF allowable in 2021.HB 2499 102nd GA Diagnostic Review and upon agreement of public entity, railroad, Commission Staff

Typical Projects Federal Funding

Federal Grants

Competitive Discretionary Grant Programs Accepting Applications

Consolidated Rail Infrastructure and Safety Improvements Program (FY 2021)

This program provides \$361,978,796 to fund capital projects that will improve intercity passenger and freight rail transportation systems in terms of safety, efficiency, or reliability.

Prior grant

Better Utilizing Investments to Leverage Development (BUILD) Grants, previously known as Transportation Investment Generating Economic Recovery (TIGER)

Grants (FY 2009 – 2020) The BUILD program is a U.S. Department of Transportation (USDOT)-wide program that provides a unique opportunity for the DOT to invest in road, rail, transit, and port projects that promise to achieve national objectives.

23 USC Section 130 Railway-Highway Crossings Program Link

Among other Federal-Aid highway sources.

ICC – Crossing Safety Improvement Program Process Improvements / Updates

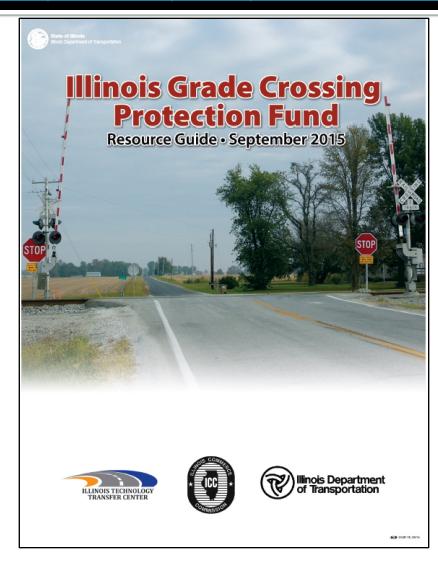
- > Joint Funding Application In development with IDOT
 - > SECTION 130 / FHWA funding & Grade Crossing Protection Funds
 - > Streamline Application
 - ➤ Utilizes IDOT's Circular system for improved distribution
 - > Better tracking of applications

NEEDED

- > Modernize ICC Info. Systems, Inspection & Project Management Software
 - > Possible RFP to report on latest options (ESRI/ArcGIS, MS Azure, custom software)
 - > Efficiency for ICC and IDOT Staff, and better database structure
 - > Highway Agency, Public, and Railroad portals for projects and data
 - > Improved notifications and updates
 - > Identify project status (Ph 1, Ph 2, Construction...) for all safety improvements
- > FIELD Review / Survey Statewide Crossing Inventory
- > \$\$ Funding sources not secured / under review

IDOT/ICC Resource Guide

https://idot.illinois.gov/Assets/uploads/files/Transportation-System/Manuals-Guides-&-Handbooks/T2/P029.pdf





Topics for Discussion



Illinois Commerce Commission - Rail Safety Main Timeline

ICC Jurisdiction and Staffing (Transportation Bureau – Rail Safety Section)

Crossing Types & Illinois Statistics

PROGRAMS

- 1. Crossing Safety Improvement Program
- 2. Inspection Program
- 3. Education & Outreach
- 4. Railroad Worker Safety

2. Inspection Program

Federal Railroad Administration – State Safety Participation Program (link)

(d) The principal role of the State Safety Participation Program in the national railroad safety effort is to provide an enhanced investigative and surveillance capability through assumption, by participating State agencies, of responsibility for planned routine compliance inspections. The FRA encourages further State contributions to the national railroad safety program consistent with overall program needs, individual State capabilities, and the willingness of the States to undertake additional investigative and surveillance activities.

Title 49 Subtitle B Chapter II (link)

Inspection Disciplines

HAZARDOUS MATERIALS

Requires extensive knowledge of federal hazardous materials regulations, Illinois Commercial Transportation Law and Illinois Commerce Commission regulations. Requires ability to recognize safety defects in the transport of hazardous materials. **Annual report required by Statute.**

TRACK SAFETY

Requires extensive knowledge and oversight of track inspection standards, track and bridge maintenance methods, and railroad maintenance machines including on-track equipment. Monitors compliance of railroad on-track safety programs including Roadway Worker Protection and Bridge Worker Safety. Enforces Federal Railroad Administration Track Safety Standards and the 92 Illinois Administrative Code subchapter for Rail Carriers.

Inspection Disciplines (Continued)

SIGNAL AND CROSSING WARNING DEVICES

Requires extensive knowledge of highway-rail grade crossing nomenclature, inspection techniques, maintenance requirements, and methods. Requires working knowledge of electricity and the ability to use electrical test equipment in direct current and alternating current circuits. Requires working knowledge of highway-rail grade crossing inspection and maintenance methods and procedures and recognize grade crossing safety defects.

TRAFFIC SIGNAL DEVICES - INTERCONNECTED CROSSINGS

Requires thorough knowledge of traffic signal design, construction, operation, and maintenance. Requires thorough knowledge of traffic signal systems interconnected with grade crossing warning devices. Requires extensive knowledge of grade crossing warning device nomenclature, operations and methods.

Inspection Disciplines (Continued)

OPERATING PRACTICES

Requires extensive knowledge of Federal Railroad Administration operating practices regulations and the Hours-of-Service Act. Requires extensive knowledge of Illinois Commercial Transportation Law and Illinois Commerce Commission Regulations regarding RxR worker safety.

MOTIVE POWER - NO COMMISSION STAFF

Inspection of locomotives, rail cars, or other motive power units.

STRUCTURAL ENGINEER- NO COMMISSION STAFF CURRENTLY

While various Staff members have bridge experience with design, construction, and maintenance we currently do not have a dedicated structural engineer or bridge team member.



Topics for Discussion



Illinois Commerce Commission - Rail Safety Main Timeline

ICC Jurisdiction and Staffing (Transportation Bureau – Rail Safety Section)

Crossing Types & Illinois Statistics

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3. Education & Outreach

RAIL SAFETY EDUCATION - OPERATION LIFESAVER

Responsible for implementation of Illinois Operation Lifesaver and rail safety public education program; conducts presentations to schools, civic groups and public safety agencies; oversees volunteer presenters statewide; media events; investigates fatal rail-highway accidents.

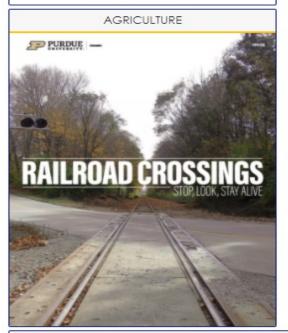
- Farming Community
- Schools
 - New drivers
 - New teachers
- Professional Drivers
 - Trucking
 - School Bus

https://www.icc.illinois.gov/rail-safety/illinois-operation-lifesaver



NEW DRIVERS

Driving Safely Near Trains



FOR KIDS







Grades K-2

Grades 3-5

FOR TEACHERS

Pre-Kindergarten

Five Big Freight Trains Lesson Plan She'll be Riding 'Round the City Lesson Plan The Circus Train Lesson Plan and Activity More Resources for Grades Pre-K-2

Kindergarten - 5th Grade

A Little Birdle Told Me Lesson Plan Measure Up to Safety Lesson Plan More Resources for Grades 3-5

6th Grade - 8th Grade

All Aboard Lesson Plan and Worksheet Is Seeing Believing Lesson Plan and Worksheet More Resources for Grades 6-8

9th Grade - 12th Grade

High School Road Trip Lesson Plan Way to Go Debaters Lesson Plan Train Vs. Car Lesson Plan and Worksheets

PROFESSIONAL DRIVERS



FOR EVERYONE

For a detailed data review of the current state of rail safety in Illinois, please click on this link: IL Rail Safety 2020.



Topics for Discussion



Illinois Commerce Commission - Rail Safety Main Timeline

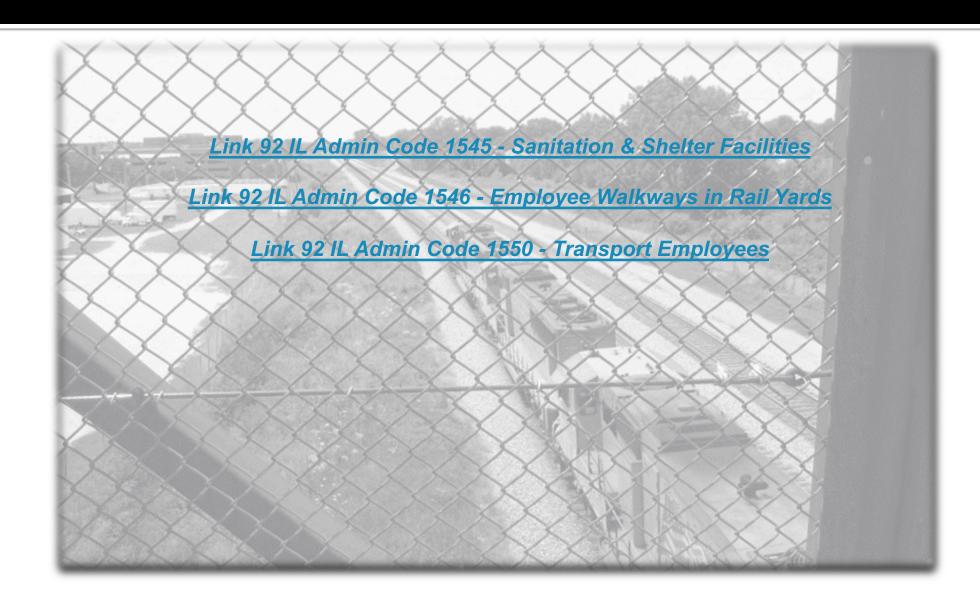
ICC Jurisdiction and Staffing (Transportation Bureau – Rail Safety Section)

Crossing Types & Illinois Statistics

PROGRAMS

- 1. Crossing Safety Improvement Program
- 2. Inspection Program
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4. Railroad Worker Safety



Railroad Worker Safety Details

Basics: What is in 92 IAC 1545?

- Drinking Water, Toilets, Washing Facilities, Showers, Locker Rooms
- Locker Sizes and specifications, Dressing Rooms
- Bunk Rooms, Camp Cars and Dormitories, Camp Facilities
- Lunchrooms, Cabooses, Cleanliness and Maintenance
- Railroad notice to ICC Rail Safety Program Administrator not less than 45 days in advance of construct, modify, or eliminate a sanitation or shelter facility.

What happens if the code is not followed?

- Notification to Supervisor, and then Authorized Employee Representative.
- Employee representative may initiate an **Informal Complaint** with ICC Staff (83 IAC 200.160). **Joint investigation** with ICC Staff, Employee & Railroad Representatives.
- If unresolved, a **Formal Complaint** under 83 IAC 200.170. Or ICC Staff Citation.
- Formal Complaint or Citation → Hearing before Adm. Law Judge → Prop. Order → Commission Order.

<u>Link - Formal Complaint Bensenville T04-0082</u> Link Citation Salem T18-0078

Quick Reference

Illinois Commerce Commission 2021 Rail Safety Bulletin 1.1 - Yearly Agenda August 18, 2021

The following provides a reference for the Commission's programs, due dates, rules & regulations, links, and contacts with respect to the duties established in 625 ILCS 5/18c – Illinois Commercial Transportation Law and Title 92: Transportation. For additional information, please contact Brian Vercruysse, Rail Safety Program Administrator (312) 636-7760 or ICC.RailSafety@illinois.gov. For Daily Docket & ICC Calendar, click <a href="https://example.com/heres/bessel/com/heres/bes

		A						
Crossing Safety Improvement Progra	am (Link)	Rail Safety Education & Outreach						
January 16th Applications Due	62 Tu	September 21, 2021	100/150 Year ICC Rail Safety Policy					
April 2021 5-Year Program Announced		September 21, 2021	Supplier Diversity Workshop					
August 31st Crossing surface renewal lists	s due from RR's	9am to 12 pm	Virtual Presentation					
CSIP Links								
Applications: 1. Public Grade Xing; 2. Hwy B	Bridae: 3. Ped Bridae	September 20 - 26th	Illinois & National Rail Safety Week					
Grade Crossing Protection Fund Resource Go								
		IL Operation Lifesaver	North Meetings – 2 nd Tuesday of Qtr.					
92 IAC 1500 Minimum Clearances			South Meetings – 1st Tuesday of Qtr.					
92 IAC 1535 Crossings of Rail Carriers and H.	ighways		(10 am March, June, Sept., Dec.)					
92 IAC 1536 Grade Crossing Closure and Ope	ening							
		Contact:	Chip Pew (312) 304-2447					
Inspection Program (Link)		Railroad Worker S	afoty					
Track Safety			i, Sanitation & Shelter Facilities (Link)					
The state of the s	ncant		i, Sanitation & Shelter Facilities (Link) i, Employee Walkways in Rail Yards (Link)					
	(217) 836-3245		, Employee Walkways in Kall Taras (Link)), Transport Employees (Link)					
	(217) 993-1014	32 IL Admin Code 1550	, Transport Employees (Link)					
Justiniey	1 (217) 555-1014	Danis	had a second limited to the fall and a					
Signal & Warning Devices ICC.RailRoadS	ianal@illinois.aov	Requirements include but are not limited to the following: • Drinking Water, Toilets, Washing Facilities, Showers, Locker						
Mgr. Design & Review Mitch Hibschman		Rooms	iets, washing raciities, showers, Locker					
	(217) 622-2353		ecifications, Dressing Rooms					
Central Chancey Weidenhame	r (309) 335-1021		Cars and Dormitories, Camp Facilities					
South Curtis Cornwel	/ (217) 720-5071	Lunchrooms, Cabooses, Cleanliness and Maintenance						
			CC Rail Safety Program Administrator not					
Traffic Signal Interconnects Stan Milewski	(312) 636-7762		advance of construct, modify, or					
Chris Murauski	(630) 947-6283		on or shelter facility.					
			erial; grade; other specifications.					
Hazardous Materials - Shannon Coy	(217) 827-1115	Requirements for v	ehicles used in the transport of railroad					
(HM Annual Report) Tim Gruhlke	(618) 292-4512		rtments, inspection, safety equipment,					
Operating Practices Dennis Mogan	(312) 590-1016	driver and employe	e responsibilities.					
Transportation Regulatory Fund (Link	1	Data Reporting	Docketing FOIA Other					
		Incident Reporting: Fo	or all incidents, RR's are required to					
Jan. 1st to 31st Designated Agent Form Due		report to IL Emergence	y Mgmt. Agency per 92 IAC 1515 (link).					
(Or within 15 days of chang	e per <u>92 IAC 1501</u>)	F 11						
		Program Policy & Cros	sing Data: Steve Laffey (217) 785-9026					

Route Mileage Fee For Rail Carriers Due

(Annual and Estimated Tax Forms)

February 1st Grade Crossing & Separation Fee Due March 31st Gross Receipts Taxes for Motor Carriers Due Crossing Search - ICC GIS Map

FOIA Requests

E-Docket Help: Heather Parks | (217) 557-5820

Informal Complaints. Email: ICC.RailSafety@illinois.gov

ICC Petition and Hearing Process

STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSION

City of Des Plaines, a body politic and corporate,

٧.

The Union Pacific Railroad Company, Illinois Department of Transportation, Cook County Highway Department, Respondents.

Petition for Order of the Illinois Commerce Commission to Repair and Maintain Certain At-Grade Railroad Crossings

The City of Des Plaines, Cook County, Illinois, a home rule municipal corporation ("City"), by its attorney Holland and Knight, petitions the Illinois Commerce Commission ("Commission"), pursuant Section 18c-7401(3) of the Illinois Commercial Transportation Law, 625 ILCS 5/18c-7401(3), to order the Union Pacific Railroad ("Union Pacific") to repair certain at-grade railroad crossings in order to preserve the public health and safety of the public. In support of its petition, the City states as follows:

- The City is a home rule political subdivision organized and existing under the laws of the State of Illinois with its principal offices in Cook County, Illinois.
- Union Pacific is a rail carrier engaged in the transportation of persons and property by rail in the State of Illinois.
- 3. The at-grade railroad crossings of the Union Pacific Milwaukee Line at Touhy Avenue, Algonquin Road, and Thacker/Dempster Street, and the at-grade railroad crossings of the Union Pacific Northwest Line at Pearson Street and Des Plaines River Road are under the jurisdiction of the Illinois Department of Transportation, Cook County

STATE OF ILLINOIS



ILLINOIS COMMERCE COMMISSION

City of Des Plaines, a body politic and corporate,

LKM:rsc

Docket No.

The Union Pacific Railroad Company, Illinois Department of Transportation, Cook County Highway Department, Respondents.

Petition for Order of the Illinois Commerce Commission to Repair and Maintain Certain At-Grade Railroad Crossings.

TO ALL COUNSEL OF RECORD:

NOTICE OF HEARING

Notice is hereby given that the hearing on the above entitled matter is scheduled for November 9, 2016 in Chicago, Illinois, at the offices of the Commission, State of Illinois Building, 160 North LaSalle Street, 8th Floor - Reception Area, at the hour of 1:30 p.m

Proposed Exhibits must be Served on Staff and all Parties at least one week prior to the Hearing.

Entered: September 29, 2016

Sathire Kirkland Montage

T16-0067

ELECTRONICALLY

Latrice Kirkland-Montaque Chief Administrative Law Judge Review & Examination Program Hearing

Admin. Law Judge

Counsel

Witnesses

Testimony

Evidence

Court Reporter

Formal Petition

Notice of Hearing

Unless waived, No Ex-Parte Communications

ICC Stipulated Agreement / No Hearing

STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSION STIPULATED AGREEMENT 2140

This Agreement made and entered into, by and between the State of Illinois acting by and through the Illinois Commerce Commission ("Commission"), the Iowa Interstate Railroad, Ltd. ("Company"), the Village of Sheffield ("Village"), and the State of Illinois, Department of Transportation ("Department" or "IDOT").

WITNESSETH

WHEREAS, it has come to the attention of the Commission through application from the village that inquiry should be made into the matter of improving public safety by voluntary vacation and permanent closure of the Reed Street highway-rail grade crossing of the Company's track in Sheffield, Bureau County, designated as crossing AAR/DOT #863570V; railroad milepost 136.82-RIM; and

WHEREAS, proper investigation has been made of the circumstances surrounding the subject crossing by a representative of the Commission's Transportation Division Railroad Section; and

WHEREAS, the physical aspects, including geometrics of the intersection, train movements, vehicular traffic volume, and sight distances and other pertinent data relating to the crossing have been obtained and shown on Exhibit A, attached to this Agreement; and

WHEREAS, the parties are mutually agreeable to accomplish proposed improvements to the crossing upon determination of the Commission by Order.

NOW. THEREFORE in consideration of the promises and of the mutual covenants and agreements as hereinafter contained the parties pray that the Commission enter an Order according to the provisions of Section 18c-7401 of the Illinois Commercial Transportation Law, 625 ILCS 5/18(c)-7401, requiring that the crossing be closed as hereinafter stated and that the cost for the proposed closure be divided among the parties according to law and that in the interest of the traveling public the Grade Crossing Protection Fund ("GCPF") of the Motor Fuel Tax. Law ("MIFT") be required to bear a substantial portion of the cost; To Wit the parties agree as follows:

<u>Section 1</u> All improvements encompassed by this Agreement shall be made in accordance with all applicable State laws, rules, standards, regulations and orders and procedures in general.

<u>Section 2</u> The parties are of the opinion that the following improvements in the interest of public safety at the aforesaid crossing should be:

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Iowa Interstate Railroad, Ltd., the Village of Sheffield, and the State of Illinois, Department of Transportation.

Stipulated Agreement regarding improving public safety : T21-0123 by permanently vacating the Reed Street highway-rail grade crossing of the lowa Interstate Railroad's track in : Sheffield, Bureau County, designated as crossing : AAR/DOT #868570V; railroad milepost 136.82-RIM.

ORDER

By the Commission:

PROCEDURAL HISTORY

On March 3, 2021, March 3, 2021, March 3, 2021, and September 16, 2021, Staff of the Illinois Commerce Commission (Commission) (Jown Interstate Ralizod, Ld. (IAIS or Company), the Village of Sheffield (Village), and the Illinois Department of Transportation (IDOT or Department, respectively, executed Stipulated Agreement 2140 according to the provisions of Section 18c-7401 of the Illinois Commercial Transportation Law. The Stipulated Agreement, which is appended hereto, provides for incentive payments from the Grade Crossing Protection Fund (GCPF), IDOT, and the IAIS to the Village for the voluntary public vacation and permanent closure of the Reed Street highway-rail grade crossing of the Company's track in Sheffield, Bureau County, Illinois, designated as crossing AARIDOT #683570V; railroad milepost 136.82-RIM. Stipulated Agreement 2140 contains a division of cost among the parties.

COMMISSION FINDINGS AND ORDER

The Commission, having given due consideration to the Stipulated Agreement, finds that:

- The Commission has jurisdiction over the parties and the subject matter of this proceeding;
- (2) The physical characteristics of the subject highway railroad grade crossing, rail and highway volumes and speeds are indicated on Exhibit A of the Stipulated Agreement appended hereto;
- (3) The parties agree that in the interest of public safety the work, as set forth in Section 2 of the Stipulated Agreement 2140, appended hereto, should be performed:

No Hearing
Streamlined
(if signatures are received)

Stipulated Agreement Signed by Parties and Commission Staff

Staff prepares Order and places on Commission Bench Session

ICC Administrative Law Hearing



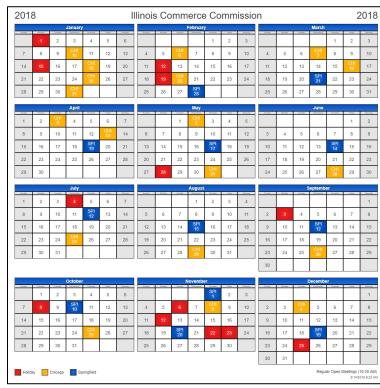
Chicago and/or Springfield

ICC Post Hearing Process

Proposed Order 14 Days for Responses 7 Days for Replies

Or

Agreed Order Quicker; Parties in Agreement Administrative Law Judge Places Order on Commission Bench (Meeting) Agenda (2 weeks prior to meeting)



ICC Commission Order (signed)

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

City of Des Plaines, a body politic and corporate, Petitioner,

T16-0067

The Union Pacific Railroad Company, Illinois Department of Transportation, Cook County Highway Department. Respondents.

Petition for Order of the Illinois Commerce Commission to Repair and Maintain Certain At-Grade Railroad Crossings.

ORDER

By the Commission:

PROCEDURAL HISTORY

On August 8, 2016, the City of Des Plaines (City) filed its Petition with the Illino Commerce Commission (Commission) naming as respondents, the Union Pacifi Railroad Company (UP or Company), the Illinois Department of Transportation (IDOT and the Cook County Highway Department (County), requesting that the UP repa various highway-rail crossing surfaces within the City in adherence with the minimum requirements of 92 Ill. Adm. Code 1535.

On May 12, 2017, Commission Staff filed a Status Report based upon a May 11 2017 field inspection performed with personnel from the UP's Track Department identifying the following:

Earlier this year (2017), the UP completed the renewal of the eastern most track at the Algonquin Road highway-rail crossing in the City of Des Plaines (City) designated as AAR/DOT #174098L, milepost 10.53. The track panel, however, was installed at a higher elevation than the second mainline track. The UP will schedule the renewal of this second track for completion in the spring/early summer of 2017. The work will include extending the asphalt approach pavement to provide a better transition to the crossing surface.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that Union acific Railroad Company, shall complete surface repairs at the Algonquin Roa AR/DOT #174098L, railroad milepost 10.50), Dempster/Thacker Street (AAR/DO 174099T, railroad milepost 10.98), and River Road (AAR/DOT #173908X, railroad nilepost 16.50) highway-rail grade crossings within the City of Des Plaines, Cook County his work shall be completed by November 17, 2017, such that the crossings meet the ninimum requirements of 92 III. Adm. Code Part 1535.203. The scope of the repairs sha iclude:

- (i) for the west mainline track of the Algonquin crossing: removing the concret surface panels, surfacing the track to the appropriate elevation, replacing an damaged concrete panels, and replacing the asphalt on the approaches an
- (ii) for the third, industry track at the Dempster/Thacker crossing removing th concrete surface panels, surfacing the track to the appropriate elevation, replacin any damaged concrete panels, and replacing the asphalt on the approaches an
- (iii) for the River Road highway-rail crossing, damaged concrete panels will b

IT IS FURTHER ORDERED that Union Pacific Railroad Company shall send a cop f the permit applications via e-mail to all parties, their counsel, and Staff to provid

IT IS FURTHER ORDERED that the Illinois Department of Transportation and the otification of the submittal. ook County Division of Transportation and Highways shall work with the UP and City t expedite the review and approval to meet the completion date of November 17, 2017.

Illinois Commerce Commission Today

Chairman and Commissioners

The ICC's mission is to balance the interests of consumers and utilities to ensure adequate, efficient, reliable, safe and least-cost public utility services, while promoting the development of an effectively competitive energy supplier market.

The ICC is also directed by state law with protecting the public by overseeing certain transportation activities, including railroad safety, insurance and registration, relocation and safety towing, and household goods moving companies.





D. Ethan Kimbre
Commissioner



Maria S. Bocanegra
Commissioner



Vacant

Questions & Thank you.



Brian Vercruysse Rail Safety Program Administrator Illinois Commerce Commission (312) 636-7760

brian.vercruysse@Illinois.gov

Close Out, Next Steps and Q&A



Review of Questions and comments submitted via chat

Closing

Monica Shaw
Monica.Shaw@dot.gov
Federal Railroad Administration

- Next Steps
- Topics for future webinars
- Spring of 2022

Michail Grizkewitsch
Michail.Grizkewitsch@dot.gov
Federal Railroad Administration

Thank you to our safety partners at the ICC, Volpe, DOTH and Metra for assisting with this webinar.



Contact Us

Federal Highway Administration Federal Railroad Administration 1200 New Jersey Avenue, SE Washington, DC 20590





Connect with us at USDOTFRA

Monica Shaw Monica.Shaw@dot.gov Federal Railroad Administration

Michail Grizkewitsch
Michail.Grizkewitsch@dot.gov
Federal Railroad Administration